SAFETY AND CLINICAL EVALUATION OF "**PADIGARA PARPAM"**
IN THE TREATMENT OF "**KIRUMI YONI ROGAM"**

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A STUDY ON

KIRUMI YONI ROGAM

(DISSERTATION SUBJECT)

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CONTENTS

INTRODUCTION

INTRODUCTION

Siddha system is one of the ancient system of medicine which maintains the physical, mental and moral health for more than 5000 years by rendering service to human.

"மறுப்பது உடல்நோய் மருந்தென லாகும்
மறுப்பது உளநோய் மருந்தென சாலும்
மறுப்பது இனிநோய் வாராதிருக்க
மறுப்பது சாவை மருந்தெனலாமே"

- திருமூலர்

According to Siddhar Thirumoolar, the concept of siddha system is to treat the man as a whole and not merely the disease alone. His definition on medicine states that a medicine is the one that not only cures the physical and psychological ailments but also prevents the ailments. Finally he emphasis that the purpose of medicine is to increase the longevity.

Siddhars are super human who, masters the wind, waves, tides, gravity & other elements and forces of nature. According to Siddhars the human body is the combination of 3 humours, 5 boothas, 7thathus and 96 thatwas.

Siddha system mainly focuses on the three humours vatha, pitha and kapha which are the fundamental principles and essential factors in the composition and constitution of the human body.When the normal equilibrium of three humours is disturbed disease is caused, so the treatment in Siddha system is aimed at keeping the three humours in equilibrium.The factors which affect the equilibrium are environment, climatic conditions, diet, physical activites and stress.

Kirumi Yoni Rogam is one among the 4448 diseases. This disease is mainly due to aggrevated pitha humour which is evident from the quote mentioned below,

"பகர்பித்த விந்தையலாது மேகம் வாராது"[7]

- தேரையர்

As per saint yougi, Kirumi Yoni Rogam is one among the 20 types of Yoni Rogam which can be correlated with specific leucorrhea (Trichomoniasis, Moneliasis etc) in Modern science.

"The development of nation lies in the empowerment of women"

Reproductive health is closely associated with culture of a country as it is well appreciated from the poetic version of Saint Yougi i.e., excessive lust will be the precipitating factor for Kirumi Yoni Rogam.

The etiology & the signs and symptoms of kirumi yoni rogam'[1]

Due to excessive lust,

- Inflammation of the vulva,
- Infection of vagina leads to increased vaginal discharge,
- Pruritis vulva,
- Vaginal discharge with odour and pain & it can be correlated with specific leucorrhea in modern science.

Kirumi Yoni Rogam is one, which affects the women commonly and frequently. Women in any reproductive age group and even young girls are commonly affected by Kirumi Yoni Rogam. The incidence of Kirumi Yoni Rogam is found in women irrespective of their socio-economic status.

Vaginal infection is more common in women of childbearing age & in older women (post menopausal period).The factors like increasing age, illiteracy, low socioeconomic status, high parity, induced abortion & place of delivery are all contributing factors for occurrence of vaginal discharge.

The most common easily curable Sexually transmitted disease a relatively neglected area of research. Among women ,Trichomoniasis increases the number of HIV-receptive cells in the genital tract. Untreated Trichomoniasis leads to an increased risk of HIV infection & associated adverse pregnancy outcomes. So there is a need for increased screening & treatment for this easily curable sexually transmissible infection.[4]

Moniliasis is caused by candida albicans, a gram positive yeast –like fungus. The patient complains of curdy white vaginal discharge with intense vulvovaginal pruritis. The predisposing factors are diabetes, pregnancy, use of broad spectrum antibiotics, combined oral contraceptive pills, steroids, immunosuppression-HIV, thyroid and parathyroid disease'[4]

Siddha formulations not only treat this disease but also strengthen the Uterus, vagina and corrects the deranged pitham without any undesirable effects. We are receiving more number of Krumi Yoni Rogam cases in our hospital which is the driving force behind to select this disease for my dissertation study.

As preparation of the trial drug Padigara parpam is cost effective efficacious & easily available, I have choosen padigara parpam as my drug of choice for the treatment of "KIRUMI YONI ROGAM" .

The main ingredient of PADIGARA PARPAM are,

- **PADIGARAM (POTASH ALUM)** [2]
- **COW'S BUTTER**
- **COW'S MILK**
- **Vehicle- GHEE** are said to possess antioxidant & anticancer property.

So there is a need to evaluate the safety and therapeutic efficacy of this classical Siddha formulation **"PADIGARA PARPAM"** mentioned in Kannusamy parambarai vaithiyam for scientific validation.

AIM AND OBJECTIVES

AIM:

The purpose of this study is to evaluate the safety and efficacy of siddha mineral formulation "PADIGARA PARPAM" in the treatment of kirumi yoni rogam.

OBJECTIVES:

- Collection of various Siddha literatures of the study.
- To correlate the Siddha aspects of Kirumi yoni rogam to specific leucorrhea of modern medicine with respect to etiology,pathology and clinical features.
- Mineral identification and authentication of the trial drug.
- To prepare the trial drug "PADIGARA PARPAM" as per SOP drug preparation (ref:Kannusaami Parambarai Vaithiyam,C. Kannusaami pillai,2006, P.No.382 &383).
- To evaluate the biochemical and physicochemical analysis of the trial drug.
- To evaluate the safety profile of the trial drug in animal models (Acute, subacute OECD guidelines) .
- To study the efficacy of the trial drug through an open clinical trial.
- To study the cofactors related to the disease (i.e., age ,socioeconomic status).

REVIEW OF LITERATURE

SIDDHA ASPECT

REVIEW OF LITERATURES

A.SIDDHA ASPECT

KIRUMI YONI ROGAM

SYNONYMS:

Vellai noi, Vettai noi, Piramegam, Piramiyam, Ozhukku noi.[5]

DEFINITION:

"வாறான சையோக மிகுதி யாலும்
வல்குலிலே சோரியது கெட்டு மேதான்
தூறான கிருமிகளு மிகவுண்டாகி
தொடருமே நமைச்சலுடன் விருப்பங் காணும்
நானான நாற்றமுட னுதிரந் தோன்றும்
நவிலவே முடியாது களையின் வேகம்
காரான யூகிமுனி சிகிச்சா சாரம்
கருதினார் லோகத்து மாண்ப ருக்கே“

- யூகி முனி

Due to excessive lust

- Inflammation of the vulva,
- Infection of vagina leads to increased vaginal discharge,
- Pruritis vulva,
- Blood stained vaginal discharge with odour and pain in females is called Kirumi Yoni Rogam.

I.AETIOLOGY:

I.ACCORDING TO YOOGI MUNI

"இயம்பவே எளியோரை யிகழ்ச்சி சொல்லல்
ஏற்றமாம் பெரியோரை ஏவல் கொள்ளல்
புயம்பவே பொன்றனையே சோரஞ் செய்தல்
பொருள்தனையே பகிர்த்தல் பெருமை சொல்லல்

நயம்பவே நம்பினார்க்கு நீடஞ் செய்தல்
நாட்டமா எந்நேரமும் பெண் போகித்தல்
பயம்பவே பயந்து வந்த பேரைக் காட்டல்
பழித்த போர் பிரமியத்திற் பமுத் பாடாமே
பாடாக பெண் போக மிக விரும்பிப்
பயின்றிட்டுப் பட்டினியே மிகவிருத்தல்
தாடாகத் தன் பாத்தில் சூடு தாங்கல்
சரசமாய்க் காரத்தை மிகப் பொசித்தல்
ஊடாக உப்புரைப்புத் துவர்ப்பு மிஞ்சல்
உக்கிரமாம் பலபலவாம் விசேசம் செய்தல்
காடான மனக்கிலேசம் காரமான
கைத்தலோடு மிருக்கலிதுகாணுக் கானே"[9]

- யூகிமுனி வைத்திய சிந்தாமணி

1.எளியோரை இகழ்ச்சி செய்தல் - Riduculating the downtrodden

2.பெரியோரை வேலை சொல்லல் - Commanding elders

3.பொன்னாலான பொருட்களை சோரம் செய்தல் - Filching gold

4.மற்றவர் பொருளை அபகரித்தல் - Filfering other things

5.பெருமை பேசல் - Self boasting

6.நம்பினவர்க்கு நீடம் சேய்தல் - Bringing loss to others

7.அடிக்கடி பெண்பொகம் விரும்புதல் - Having thought of sexual intercourse always

8.மிகுந்த பட்டினி - Starvation for longtime

9.கடுமையான வெய்யிலில் அதிகம் நடத்தலினால் ஏற்படும் பாதங்களில் சூடு- Walking without footwear

10.காரமான பொருட்கள், உப்பு, துவர்ப்பு, கைப்பு சுவையுடைய பொருட்களை அதிகம் புசித்தல்

- Increased intake of spicy food, salty food, astringents and bitter tasty foods.

II. ACCORDING TO AGASTHIYAR GUNAVAGADAM

" கேளடா பிரமேக உள்பத்தி தன்னை
கெணிதமுடன் சொல்லுகின்றேன் நன்றாய்க் கேளு
நாளடா ஸ்த்ரீபோகம் அதிகரித்தாலும்
நன்மையுடன் மோகமுடன் பட்டினியாலும்
வாளடா ஸ்தம்பனங்கள் செய்வதாலும்
பாழடா அதிகமாய் புசிப்பதாலே
பாங்கான பிரமேகந் தோணும் பாரே"

-அகத்தியர் குணவாகடம்

1. Repeated sexual act
2. Lustfulness with starvation
3. Restraining the ejaculation of semen during sexual intercourse
4. High intake of salty, salty and astringent foods.

III ACCORDING TO THIRUMOOLAR KARUKKIDAI VAITHIYAM 600

"அன்னம் பிறந்தது அனைத்து விதையிலும்
மன்னிய வெட்டை மகாசீதம் இரண்டினால்
பன்னி அறிந்திதைப் பார்பார் பெரியோர்கள்
கன்னி மயக்கத்தால் கண்டிடும் மேகமே"
‘மேகம் பிறந்த விதந் சொன்னா ரெந்நந்தி
ஆம்மிளத்தைப் பருவமதில் மோகித்தும்
போகந்தினஞ் செய்யிற் புகழ் மந்தத்தே கூடில்
வாகப் பசியால் வழங்கஞ் சையோகமே"
‘சையோகம் செய்யத் தனித்த சுழியோடும்
ஐயா அமிர்தம் அடக்கிக் கனலேறும்
மெய்யாக விந்து விழப் புண்ணாகும்
மையான மேகம் வளருங் கிரந்தியே"

-திருமூலர் கருக்கிடை வைத்தியம் 600

Performing sexual act in the adolescent age,during digestive disturbances and doing improper practice of kundalini yoga.

IV.ACCORDING TO AGASTHIYAR VAIDDHIYA KAAVIYAM 1500

"மேகங்கள் பிறந்து நின்ற விதங்களை விளம்பக் கேளு
ஆகங்கள் இகழ்ந்தபோது அப்பனே தினமும் சென்ற
போகங்கள் செய்யும் போதும் புகழ்மந்தம் கூட்டும் போதும்
பாகங்கள் பசியனூடும் பருகுஞ் சையோகந்தனே
சையோகஞ் செய்யும் போதும் தனிநின்ற சுழியேயோடு
மையவோ அமுர்தந்தன்னை அடக்கியே அனல்தான் கொள்ளும்
மெய்யடா விந்துகாணில் விழவிழப் புண்ணுந்தானு
மையடா மேகத்தாலே வளர்ந்தது கிரந்திபாரே"

-அகத்தியர் வைத்தியம் 1500

Insulting or reticulating the sacred books, excessive sexual act, having sex during indigestion & hungry and suppressing the ejaculation of semen during sexual act cause Meganoi.

v. According to **T.V.SAMBASIVAM PILLAI** the chief causes of Kirumi Yoni Rogam is

- Veneral disorder
- Improper dietary habits
- Intemperate habits
- Conceptional defects
- Any accidental happening
- Prostitution

VI. According to **Prof.Dr.Venugopal** in his text magalir maruthuvam (Page No.124)

1.Due to physiological factors

2.Altered sexual indulgence.

NOI ENN (CLASSIFICATION):

Yugimuni classified penkuri roga padalam into 20 types. They are as follows:[1]

- வாத யோனி ரோகம்
- பித்த யோனி ரோகம்
- கப யோனி ரோகம்
- குருதி யோனி ரோகம்
- குருதிசீழ் யோனி ரோகம்
- வலி யோனி ரோகம்
- கொதிப்பு யோனி ரோகம்
- சூலை யோனி ரோகம்
- சுட்க யோனி ரோகம்
- கோழை யோனி ரோகம்
- சிவப்பு யோனி ரோகம்
- வடி யோனி ரோகம்
- மகா யோனி ரோகம்
- நபோஜக யோனி ரோகம்
- அதிசரண யோனி ரோகம்
- தூலித யோனி ரோகம்
- பூப்புக்கால யோனி ரோகம்
- கிருமி யோனி ரோகம்
- தாமரைக்காய் யோனி ரோகம்
- விபரீதப்புணரோனி ரோகம்

MUKKUTRA IYAL (PATHOLOGY):

Certain extrinsic and intrinsic factors alter the equilibrium of tridosha and produces the disease. Kirumi Yoni Rogam is mainly due to aggrevated pitha humour which are evident from the quote mentioned below,

"பகர்பித்த விந்தையலாது மேகம் வாராது"[7]

- தேரையர் (ref. Noi Nadal Noimuthal Nadal part I)

It denotes that alteration of pitham causes mega diseases. Altered pitham affects abanan and viyanan.

Affected abanan alters the theyu pootham which leads to burning sensation in the urethra, burning micturition, purulent discharge in the urethra, low back pain and constipation.

Affected viyanan alters akaya pootham which leads to loss of appetite, fatigue, pain all over the body, emaciation, altered sleep rhythm and mental tiredness.

UDAL KATTUKAL:

These are seven basic principles which constitute the entire body described in Siddha text.

SEVEN PHYSICAL CONSTITUENTS OF THE BODY

1. Saaram	-	This gives mental and physical perseverance.
2. Senneer	-	Imparts colour to the body and nourishes the body
3. Oon	-	It gives shape to the body according to the physical activity and plasters the skeleton to give the body a plumpy appearance.
4. Kozhuppu	-	It lubricates the joints and other parts of the body for a. smooth functioning.
5. Enbu	-	Supports the frame and responsible for the postures and a. movements of the body.
6. Moolai	-	It occupies the medulla of the bones and gives strength and softness to them.
7. Sukkilam/Suronitham	-	It is responsible for reproduction.

In case of Kirumi Yoni Rogam saram, senneer, oon, kozhuppu, enbu, suronitham are affected.

Saram	-	Loss of apetite, fatigue.
Senneer	-	Weakness of the body,anemia.
Oon	-	low Back pain,
Kozhupppu	-	Emaciation
Enbu	-	low back pain
Suronitham	-	Yellowish or curdy vaginal discharge.

PINIYARI MURAIMAI: [7]

Pini means the disease which affect the body.Any interruption of the normal functions of any body part, organ or system.

Ari means identify. Muraimai means Rules

Piniyari muraimai is the method of diagnosing the disease in affected people. It is based upon the following aspects:

1. Poriyalarithal
2. Pulanaalarithal
3. Vinaathal
4. Envagaithervugal
5. Naadiparitchai

The above principles correspond to the methodology of inspection, palpation and interrogation of modern medicine.

Poriyalarithal :

"Pori"- are the five organs of perception namely,

1.Nose

2.Tongue

3.Eyes

4.Ears and

5.Skin

Pulanarithal:

“Pulan” are the five object of sense namely

1.Smell

2.Taste

3.Vision

4.Hearing

5.Touch respectively.

Physician‘s pori and pulan are used as the tools for examining the pori, pulan of the patient.

Vinathal:

It is a procedure for gathering information about the patients name, age,occupation, nativity, socio economic status, family history, dietary habits, allergic factors, period of suffering from the complaints, history of previous episodes, relevant history of habits and treatment etc…from the patient or from his immediate relatives, if the patient is not in a position to speak or if the patient is child.

In Kirumi Yoni Rogam vinathal is very much useful for Piniyarimuraimai, occupation, family history, dietary haits, proper treatment and socio economic status are very important for Kirumi Yoni Rogam.

Envagai thervugal: [7]

Eight different kinds of tests to be applied or attended by a physician before arriving

a correct diagnosis. These are also called Attavitha Paritchai or Attasthanna Parikshai.

Envagai thervugal is considered as physician‘s Instrument.

" நாடி பரிசம் நா நிறம் மொழி விழி
மலம் மூத்திரமிவை மருத்துவராயுதம்”

According to Theraiyar

“மெய்க்குறி நிறம் தொனி விழிநா
இருமலம் கைக்குறி"

According to Agasthiyar Guna Vagadam:

"தரணியுள்ள வியாதிதன்னை யட்டாங்கத்தால்
தானறிய வேண்டுவது யாதோ வென்னில்
திரணியதோர் நாடி கண்கள் சத்தத்தோடு
தேகத்தினது பரிசம் வருணம் நாக்கு
யிரண மல மூத்திரா மிவைக ளெட்டும்
ரணருளால் பெரியோர்கள் பாதம் போற்றிப்
பண்பு தவறாமல் பண்டிதஞ் செய்வீரே"

Noi Nadal Noi Muthal Nadal Part-I, Page:129

1. Naadi (Pulse)
2. Sparisam (Palpation)
3. Naa (Tongue examination)
4. Niram (Colour of the body)
5. Mozhi (Speech)
6. Vizhi (Eye Examination)
7. Malam (Motion Examination)
8. Moothiram (Urine examination)

1.Naadi:

Naadi is the vital force and the main diagnostic scale in the Siddha system.Any change in the three doshas are best diagnosed by feeling the naadi.Naadi is responsible for the existence of life and can be felt one inch below the wrist on the radial side by means of palapation with the tips of index, middle and ring finger corresponding to Vatham ,Pitham and Kabam.Normally these 3 vital forces exist In the ratio 1:1/2:1/4. Derrangement of this ratio leads to various disease entities.

In Kirumi Yoni Rogam the following Naadi nadai are seen commonly,

1.Pitham
2.Vatham
3.Vathapitham

In sathaga naadi padal:[7]

"உறுதியுள்ள பித்தமது தோன்றில் வெப்பு
உட்னவாய் வத்திசுர மதிசாரங்கள்
மறதியுடன் கிறுகிறுப்புப் பைத்திய ரோகம்
வளர்சோகை யழலெரிவு காந்தல் கைப்பு
இருதயத்திற் கலக்கமது மறப்பு தாகம்
எழுங்கனவு பேயணைவு மயக்க மூர்ச்சை
சிறிது பெரும்பாடு ரத்த பிரமேகங்கள்
சேர்ந்து வெகு பிணி பலவுஞ் சிறக்குத் தானே"

Due to derangement of Vatha naadi,

"வாதமெனும் நாடியதுதோன்றில்.....
.....தந்துமேகம்"

2. Sparisam:

The following points are elicited by Sparisam , the temperature of skin (Heat or cold) , smoothness, roughness, softness, sweat , dryness , sensation .

In Kirumi Yoni Rogam along with general sparism aspects ,it is especially used for per vaginal examination.

3. Naa:

By inspecting the tongue its colour, coating, ulcer, deviation, roughness, silky soft & any abnormality of the tongue is noted.

In Kirumi Yoni Rogam the tongue will be dry and coated denotes less appetite. If anemia is present the tongue will pallor.

4. Niram:

It denotes the colour of skin, palm etc. The colour of vaginal discharge expel out represents the type of kuttram.

5. Mozhi:

It constitutes high or low pithched voice, slurring, incoherent speech, nasal speech, hoarseness of voice.

In Kirumi Yoni Rogam the tone and speech will be in medium mode.

6. Vizhi:

Both motor and sensory disturbances of eye are noted. Burning sensation of eyes,lacrimation, irritation, colour are noted.

In Kirumi Yoni Rogam burning sensation of eyes is present.

7. Malam Faeces) :

In the examination of Malam, Niram (colour) ,Nurai (froth), Erugal (Solid).,Elagal (Semisolid or liquid), quantity (increased or decreased) smell can be noted other examination like diarrhea, presence of blood, mucus, undigested matter in the stools and odour can also be studied.

8**. Moothiram: (Urine)**

In the examinantion of urine, colour, odour, quantity of urine, the presence of froth, deposits, blood, pus, inorganic sediments, abnormal constituents such as sugar, protein etc… and the frequency of micturitions are to be noted.

The diagnosis is usually arrived by methods of urine examinations called

1.NEERKURI

2.NEIKURI.

Collection of Urine:

"அருந்துமாறிரதமும் அவிடோ தமதய்
அக்கல் அலர்தல் அகாலவூன் தவிர்ந்தழ்ற்
குற்றளவருந்தி உறங்கி வைகறை
ஆடிக் கலசத் தாவியே காதுபெய்

தொரு மூகூர்த்தக் கலைல்குட்படு நீரின்
நிறக்குறி நெய்க்குறி நிருமித்தல் கடனே
-தேரையர் நீர்க்குறி நெய்க்குறி நூல்[8]

Prior to the day of urine examination, the patient should be advised to take a balanced diet and should have good rest.The first voided urine of the patient is collected in a glass container. The colour, volume, froth, smell, specific gravity and sedimentation is noted. A drop of Gingelly oil is added into the container without any disturbance and the tendency to spread is examined with in 1 ½ hrs.

i.Neerkuri:

"வந்த நீர் கரி எடை மணம் நுரை எஞ்சலென்
றைந்திய லுளவவை யறைகது முறையே"

In Neerkuri, Niram, Edai, Manam, Nurai and Enjal of the urine voided is noted.

"அருப்பா முற்றார்க் கவ்விதி விலக்கே"

The following parameters in the urine should be examined.

Niram : It indicates the colour of the urine voided.

Edai : It indicates the specific gravity of urine (increased or decreased quantity)

Manam : It indicates the smell of urine voided.

Nurai : It indicates the frothy nature of urine voided

Enjal : It indicates the quantity of urine

In addition frequency of micturition, burning micturition, any sedimentation and any associated discharge can be find out.

In Kirumi Yoni Rogam burning and painful micturition associated with purulent discharge.

ii.Neikuri:

A drop of Gingelly oil is dropped into a wide mouthed vessel containing the urine to be tested and kept it under the sunlight in a air free place. The variations of the three thathus in disease can be diagnosed by the behaviour of Gingelly oil on the surface of urine.

Observation

I. **Vathaneer:**

"அரவென நீண்டின் அஃதே வாதம்"

The drop of oil lengthening like a snake indicates Vatham (Vali)

II. **Pithaneer:**

"ஆழிபோற் பரவின் அஃதெ பித்தம்"

The drop of oil spreading like a ring it indicates Pitham (Azhal)

III. **Kabaneer:**

"முத்தொத்து நிற்கின் மொழிவதென் கபமே"

If the oil drops assumes a pearl shape it is presumed to be Kabham(Iyam).

IV. **Thonthaneer:**

"அரவிலாழியும் ஆழியில் அரவும் அரவில் முத்தும் ஆழியில்முத்தும்
தோற்றில் தொந்த தோடங் களாமே"

When the drop of oil shows two shapes enclosed within one another it indicates thonthaneer.

In Kirumi Yoni Rogam the neikuri spreads like a ring. By the careful examination of the urine with gingelly oil, the physicians can know whether the disease is curable or not. For this purpose Siddhars have explained various spreading tendencies of oil on urine surface to define the prognosis of the disease.

Noi Kanippu vivadham

1) **கருப்பை கழுந்து தாபிதம்:**[1]

குடும்பா கட்டுப்பாட்டிற்கான உலோகங்களினாலோ இராசாயணப் பொருள்களினாலோ செய்த கருவிகளை நீடித்த காலம் உபயோகப்படுத்தினாலும் கருப்பை கழுந்து தாபிதம் உண்டாகும்.

By the use of contraceptive devices for longtime, inflammation occurs.

குறிகுணம்:

- யோனிகசிவு
- புச்சப்பாலிகை பொருத்து வலி
- குறுக்கு வலி
- நீர் அருகல்
- அடிக்கடிசிறுநீர் கழிவு

Vaginal secretion, Low back pain, Dysuria, Incontinence of urine, Polyuria

2)சினைப்பை தாபிதம்:

பிசுபிசுத்த சளி போன்ற கசிவு
அடிவயிற்றில் கடுகடுத்த வலி
மலச்சிக்கல் உடற்காங்கை உயறும்
நாக்கு வறண்டு மாவு படிந்திருக்கும்
பூப்பு காலங்களில் பெரும்பாடு

Mucous vaginal discharge, Lower abdominal pain, Constipation, Increased body temperature,Coated tongue, Mennorhagia.

Maruthuvam (treatment) :[7]

"உற்றானளவும் பிணியளவுங் காலமும்
கற்றான் கருதிச் செயல்"

-குறள்

The treatment should be based on the age and body built of the patient, the severity of the disease and the period of the ailment. Siddha system of medicine besides treating the diseases and improves the body condition. This is said as follows:

a. Kaappu (Prevention)

b. Neekkam (Treatment)

c. Niraivu (Restoration of well being)

a. **Kaappu (Prevention):**

Siddha system has unequivocally stated that even during the time of conception,some defects creep into the fertilized embryo**,** which forms certain diseases. Those diseases may be cured not only by medicine but by teaching the following habits.

- Teaching good moral habits
- Avoid excessive sex indulgence
- Aviod pre and extra marital sex
- Avoid sex after taking oil bath and curd rice
- Avoid stress and anxiety
- Always have good mental thoughts by doing meditation
- Avoid the use of un hygienic undergarments
- Always wash the undergarments in a soap plus disinfectant solution
- Avoid urinary infection by taking large amount of water
- Avoid increased intake of spicy,sour and salty foods
- Taking oil bath regularly
- Taking laxative once in 6 months
- Always do yoga practice and pranayamam according to their physical and mental conditions.

Medicine: Padigara parpam 130mg twice a day after food with ghee for 24 days.

b. Neekkam (Treatment):

According to Noi Nadal and Noi muthal Nadal a good physician should know the deranged kuttram and treat the patients on the basis of altered kuttram.

"முப்பிணி மருவி முறிவுகொள் குறிப்பை
தப்பாதறியும் தன்மையும் வாதவித்தவையப் பிரிவையு மவைதாம்
ஏறியிறங்கி இணைந்து கலந்து
மாறி மாறி வருந்து செய்கையாற் பிணி
நேர்மையறிந்து நீட்டு மருந்தே
சீரியதா மெனச் செப்புவர் சித்தரே"

- Noi Nadal and Noi muthal Nadal Part I

The aim of treatment is based on

- Bringing of tridosham to normal
- To treat the disease according to its symptoms by internal

For normalizing tridosham:

“விரேசனத்தால் வாதம் தாழும்
வமனத்தால் பித்தம் தாழும்
நசிய அஞ்சனத்தால் கபம் தாழும்"

- Vatha diseases can be brought down by “viraesanam”. For this laxatives and purgatives are given according to patients tolerance to drug and also the severity of the disease should be assessed.
- Pitha diseases can be brought down by giving “vamanam” and kabha diseases can be brought down by “Anjanam” and “Nasiyam”.
- In Kirumi Yoni Rogam pitham is altered as well as vatham. So laxative is administered on the first day or before starting the specific treatment.

Pathiyam:

During the course of the treatment ,the patient is advised to follow certain precautions regarding diet and physical activities. This form of medical advice in Siddha system of medicine is termed as “PATHIYAM” which is very important in Siddha system of medicine.

"பத்தியத்தினாலெ பலனுண்டாகும் மருந்து
பத்தியங்கள் போனால் பலன்போகும்-பத்தியத்தில்
பத்தியமே வெற்றி தரும் பண்டிதருக் காதலினாத
பத்தியமே உத்தியென பார்"

Pathiyam has been classified into itchapathiyam and kadum pathiyam

Itchapathiyam:

"கடுகிநற்றிலத் தெண்ணெய்கூழ்ப் பாண்டங்கள் கடலை
வடிவதாகிய தெங்குமா வருக்கைநற் காயம்
மடிவிலாதவெள் ளுள்ளிகொள் புகையிலை மதுபெண்
இடதுபாகலோ டகத்திநீக் கிடலிச்சா பத்தியம்"

Kadum pathiyam:

"கடுமை யென்றிடு பத்தியம் மூவர்வறுத் துண்டல்
ஆடைவிலா மறுபத்தித் துவர் வறுத்தருத்தல்
கொடுமை செய்புளி தனைச்சுட்டு கூட்டிட லன்றிப்
படியில் கத்திரி சிக்குரை பிஞ்சினைப் பருகல்"

Pathiyam (diet) for Pitha disease:

Pathiyam for pitha disease as mentioned in patharthaguna chindamani is as follows:

"கொம்மட்டி வாழைப்பன்னாங் கொளுத்திய கரியி நோடே
விம்மிய தண்ணீர்விட்டான் வேரெனுங் கிழங்கு சாந்தஞ்
செம்மைசேர் நெல்லிமுள்ளி சேருமில் மருந்தெல்லாமே
கம்மிய மித்தத்திற்கு காலலென் றோது வாரே"

c.Niraivu (Restoration of well being):

1. Reassurance of recovery were given to every patients.
2. Every patient were advised to follow strict diet restrictions,good moral behaviour.

DIET AND ADVICE:

The following diet to be taken:

- Drink adequate water
- Leafy greens & vegetables
- Lady's finger
- Onion
- Ginger
- Steamed vegetables & vegetable salads
- Riped bananas
- Lemon or orange juice
- Apple
- Black plums
- Pears
- Gooseberry
- Dates
- Fig fruit
- Pome granate
- Grapes
- Guava
- Whole wheat
- Brown rice
- Milk
- Butter milk
- Ghee
- Fenugreek
- Coriander seeds
- Cumin seeds

The following food should be avoided:

- Bitter gourd
- Chicken
- Meat

- Coconut
- Jack fruit
- Asafoetida
- Mango
- Brinjal
- Sesbanian leaves
- Mustard
- Sesame
- Tamarind
- Eggs
- Mushrooms
- Bread
- Sweets
- White sugar
- Tea
- Coffee
- Preserved cool drinks
- Oily & fried foods
- Sour foods

AVOID:

- Tobacco
- Alcohol
- Excessive lust

MODERN ASPECT

REVIEW OF LITERATURES

A. MODERN ASPECT

ANATOMY OF THE FEMALE REPRODUCTIVE SYSTEM[14]

The female reproductive system can be divided into the external and internal genitalia. The external genital organs are vulva and the vagina. The internal genital organs are uterus, cervix, fallopian tubes, ovaries and other supporting structures.

The vulva is an ill-defined area, which comprises the following structures.

- The Mons pubis
- The Labia majora
- The Labia minora
- The Clitoris
- The Vestibule
- The External meatus
- Bartholin's gland.
- The Hymen, surrounding the orifice
- The Navicular fossa
- The Fourchette

The external genital organs have three main functions:

- Enabling sperm to enter the body
- Protecting the internal genital organs from infectious organisms
- Providing sexual pleasure

1.**The Mons pubis:**

The mons pubis is a rounded mound of fatty tissue that covers the pubic bone. During puberty, it becomes covered with hair. The mons pubis contains oil-secreting (sebaceous) glands that release substances that are involved in sexual attraction (pheromones).

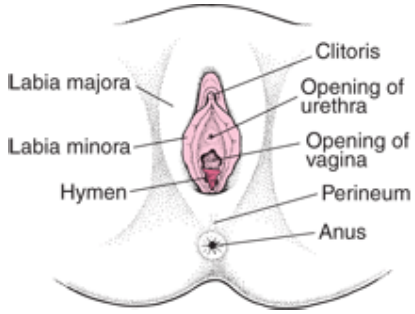
2.The Labia Majora:

The labia majora (literally, large lips) are relatively large, fleshy folds of tissue that enclose and protect the other external genital organs. They are comparable to the scrotum in males. The labia majora contain sweat and sebaceous glands, which produce lubricating secretions. During puberty, hair appears on the labia majora.

3.The Labia Minora

The labia minora (literally, small lips) can be very small or up to 2 inches wide. The labia minora lie just inside the labia majora and surround the openings to the vagina and urethra. A rich supply of blood vessels gives the labia minora a pink color. During sexual stimulation, these blood vessels become engorged with blood, causing the labia minora to swell and become more sensitive to stimulation.

External Female Genital Organs



4.Clitoris:

The clitoris is an erectile structure found beneath the anterior joining of the labia minora. Its width in an adult female is approximately 1 cm, with an average length of 1.5–2.0 cm. The clitoris is made up of 2 crura, which attach to the periosteum of the ischiopubic rami. It is a very sensitive structure, analogous to the male penis. It is innervated by the dorsal nerve of the clitoris, a terminal branch of the pudendal nerve.

5.Vestibule :

6. Urethra:

Between the clitoris and the vaginal introitus (opening) is a triangular area known as the vestibule, which extends to the posterior fourchette. The vestibule is where the urethral (urinary) meatus is found, approximately 1 cm anterior to the vaginal orifice, and it also gives rise to the opening of the Skene glands bilaterally. The urethra is composed

of membranous connective tissue and links the urinary bladder to the vestibule externally. A female urethra ranges in length from 3.5 to 5.0 cm.

7. Bartholin glands:

The greater vestibular (Bartholin) glands are responsible for secreting lubrication to the vagina, with openings just outside the hymen, bilaterally, at the posterior aspect of the vagina. Each gland is small, similar in shape to a kidney bean.

8.Hymen:

The hymen is a thin membrane found at the entrance to the vaginal orifice. Often, this membrane is perforated before the onset of menstruation, allowing flow of menses. The hymen varies greatly in shape.

INTERNAL GENITALIA

Vagina:

The vagina extends from the vulva externally to the uterine cervix internally. It is located within the pelvis, anterior to the rectum and posterior to the urinary bladder. The vagina lies at a 90º angle in relation to the uterus. The vagina is held in place by endopelvic fascia and ligaments (see the image below).

The vagina is lined by rugae, which are situated in folds throughout. These allow easy distention, especially during child bearing. The structure of the vagina is a network of connective, membranous, and erectile tissues.

The pelvic diaphragm, the sphincter urethrae and transverse peroneus muscles, and the perineal membrane support the vagina. The sphincter urethrae and the transverse peroneus are innervated by perineal branches of the pudendal nerve. The pelvic diaphragm primarily refers to the levator ani and the coccygeus and is innervated by branches of sacral nerves S2-S4.

The vascular supply to the vagina is primarily from the vaginal artery, a branch of the anterior division of the internal iliac artery. Several of these arteries may be found on either side of the pelvis to richly supply the vagina.

The nerve supply to the vagina is primarily from the autonomic nervous system. Sensory fibers to the lower vagina arise from the pudendal nerve, and pain fibers are from sacral nerve roots. Lymphatic drainage of the vagina is generally to the external iliac

nodes (upper third of the vagina), the common and internal iliac nodes (middle third), and the superficial inguinal nodes (lower third).

The vaginal secretion:

The vaginal secretion is small in amount in healthy women and consists of white coagulated material. The top layers are rich in glycogen and some of these squamous cells are shed &acted on by the gram positive Doderlein bacilli present in the vagina, converting this glycogen into lactic acid. This action is responsible for maintaining the pH of the vagina around 4.5 and preventing the growth of pathogenic organisms.

Because of this protective function,the doderline bacillus is considered as vaginal policeman. However with menopause and also prior to puberty ,the vaginal mucosa is thin ,devoid of glycogen due to the absence of estrogenic stimulus, hence the pH of the vagina is alkaline.

The vaginal pool contains desquamated epithelial cells from the cervix, uterus and vagina. These cells are aspirated and the smears are papanicolaou-stained for assessment of ovarian function & also for the early detection of genital cancer especially, of the cervix.

Normal Vaginal Flora:

Resident vaginal flora consists of a combination of both aerobic and anaerobic organisms. The microflora of normal vaginal secretions is characterized by a predominance of lactobacilli, primarily acidophilic lactobacilli. Usually, an additional 5 to 15 bacterial species are also normally cultured from the vagina G. vaginalis can be found in >50% of normal, healthy women.

Common aerobic facultative organisms found include lactobacilli, staphylococcus epidermis, streptococci and G. Vaginalis. The anaerobic organism commonly found includes Bacteroides species, B.bivius and Peptostreptococcus.

Mycoplasma hominis can be found in 20% to 50% and Ureaplasma urealyticum can be found in 50% to 70% of sexually active women. In women with normal vaginal flora, lactobacillus species account for >95% of the total organisms present.

Uterus:

The uterus is the inverted pear-shaped female reproductive organ that lies in the midline of the body, within the pelvis between the bladder and the rectum. It is thick-walled and muscular, with a lining that, during reproductive years, changes in response to hormone stimulation throughout a woman's monthly cycle.

The uterus can be divided into 2 parts: the most inferior aspect is the cervix, and the bulk of the organ is called the body of the uterus (corpus uteri). Between these 2 is the isthmus, a short area of constriction.

The body of the uterus is globe-shaped and is typically situated in an anteverted position, at a 90º angle to the vagina. The upper aspect of the body is dome-shaped and is called the fundus; it is typically the most muscular part of the uterus. The body of the uterus is responsible for holding a pregnancy, and strong uterine wall contractions help to expel the fetus during labor and delivery.

The average weight of a nonpregnant, nulliparous uterus is approximately 40-50 g. A multiparous uterus may weigh slightly more than this, with an upper limit of approximately 110 g. A menopausal uterus is small and atrophied and typically weighs much less.

The cavity of the uterus is flattened and triangular. The uterine tubes enter the uterine cavity bilaterally in the superolateral portion of the cavity.

The uterus is connected to its surrounding structures by a series of ligaments and connective tissue. The pelvic peritoneum is attached to the body and the cervix as the broad ligament, reflecting onto the bladder. The broad ligament attaches the uterus to the lateral pelvic side walls. Within the broad base of the broad ligament, between its anterior and posterior laminae, connective tissue strands associated with the uterine and vaginal vessels help to support the uterus and vagina. Together, these strands are referred to as the cardinal ligament.

Rectouterine ligaments, lying within peritoneal folds, stretch posteriorly from the cervix to reach the sacrum. The round ligaments of the uterus are much denser structures and connect the uterus to the anterolateral abdominal wall at the deep inguinal ring. They lie within the anterior lamina of the broad ligament. Within the round ligament is the artery of Sampson, a small artery that must be ligated during hysterectomy.

The vasculature of the uterus is derived from the uterine arteries and veins. The uterine vessels arise from the anterior division of the internal iliac, and branches of the uterine artery anastomose with the ovarian artery along the uterine tube.

The nerve supply and lymphatic drainage of the uterus are complex. Lymphatic drainage is primarily to the lateral aortic, pelvic, and iliac nodes that surround the iliac vessels. The nerve supply is attained through the sympathetic nervous system (by way of the hypogastric and ovarian plexuses) and the parasympathetic nervous system (by way of the pelvic splanchnic nerves from the second through fourth sacral nerves).

Cervix:

The cervix is the inferior portion of the uterus, separating the body of the uterus from the vagina. The cervix is cylindrical in shape, with an endocervical canal located in the midline, allowing passage of semen into the uterus. The external opening into the vagina is termed the external os , and the internal opening into the endometrial cavity is termed the internal os. The internal os is the portion of a female cervix that dilates to allow delivery of the fetus during labor. The average length of the cervix is 3-5 cm.

The vasculature is supplied by descending branches of the uterine artery, which run bilaterally at the 3 o'clock and 9 o'clock position of the cervix. The nerve supply to the cervix is via the parasympathetic nervous system by way of the second through fourth sacral segments. Many pain nerve fibers run alongside these parasympathetics. Lymphatic drainage of the cervix is complex. The obturator, common iliac, internal iliac, external iliac, and visceral parametrial nodes are the main drainage points.

Uterine tubes:

The uterine tubes (also referred to as oviducts or fallopian tubes) are uterine appendages located bilaterally at the superior portion of the cavity. Their primary function is to transport sperm toward the egg, which is released by the ovary, and then to allow passage of the fertilized egg back to the uterus for implantation.

The uterine tubes exit the uterus through an area known as the cornua and form a connection between the endometrial and peritoneal cavities. Each tube is approximately 10 cm in length and 1 cm in diameter and is situated within a portion of the broad ligament called the mesosalpinx. The distal portion of the uterine tube ends in an orientation encircling the ovary.

The uterine tube has 3 parts. The first segment, closest to the uterus, is called the isthmus. The second segment is the ampulla, which becomes more dilated in diameter and is the typical place of fertilization. The final segment, furthest from the uterus, is the

infundibulum. The infundibulum gives rise to the fimbriae, fingerlike projections that are responsible for catching the egg that is released by the ovary.

The arterial supply to the uterine tubes is from branches of the uterine and ovarian arteries, small vessels that are located within the mesosalpinx. The nerve supply to the uterine tubes is via both sympathetic and parasympathetic fibers. Sensory fibers run from thoracic segments 11-12 and lumbar segment 1. Lymphatic drainage of the uterine tubes is through the iliac and aortic nodes.

Ovaries:

The ovaries are paired organs located on either side of the uterus within the mesovarium portion of the broad ligament below the uterine tubes. The ovaries are responsible for housing and releasing the ova, or eggs, necessary for reproduction. At birth, a female has approximately 1-2 million eggs, but only 300 of these eggs ever mature and are released for the purpose of fertilization.

The ovaries are small and oval-shaped, exhibit a grayish color, and have an uneven surface. The actual size of an ovary depends on a woman's age and hormonal status; the ovaries are approximately 3-5 cm in length during childbearing years and become much smaller and atrophic once menopause occurs. A cross-section of the ovary reveals many cystic structures that vary in size. These structures represent ovarian follicles at different stages of development and degeneration.

Several ligaments support the ovary. The ovarian ligament connects the uterus and ovary. The posterior portion of the broad ligament forms the mesovarium, which supports the ovary and houses the vascular supply. The suspensory ligament of the ovary (infundibular pelvic ligament), a peritoneal fold overlying the ovarian vessels, attaches the ovary to the pelvic side wall.

Blood supply to the ovary is via the ovarian artery; both right and left ovarian arteries originate directly from the descending aorta at the level of the L2 vertebra. The ovarian artery and vein enter and exit the ovary at the hilum. The left ovarian vein drains into the left renal vein, and the right ovarian vein empties directly into the inferior vena cava.

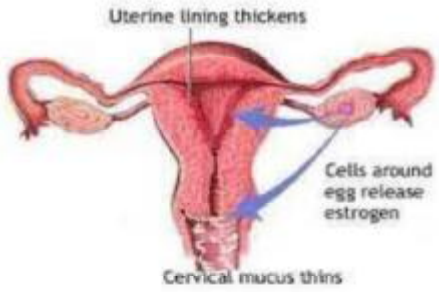
Nerve supply to the ovaries run with the vasculature within the suspensory ligament of the ovary, entering the ovary at the hilum. Supply is through the ovarian, hypogastric, and aortic plexuses. Lymphatic drainage of the ovary is primarily to the lateral aortic nodes; however, the iliac nodes may also be involved.

LEUCORRHEA[4]

Leukorrhea is a thick, whitish or yellowish vaginal discharge There are many causes of leukorrhea, the usual one being estrogen imbalance. The amount of discharge may increase due to vaginal infection or STDs, and also it may disappear and reappear from time to time, this discharge can keep occurring for years in which case it becomes more yellow and foul-smelling; it is usually a non-pathological symptom secondary to inflammatory conditions of vagina or cervix.

Leukorrhea can be confirmed by finding >10 WBC under a microscope when examining vaginal fluid.

Vaginal discharge is not abnormal, and causes of change in discharge include infection, malignancy, and hormonal changes. It sometimes occurs before a girl has her first period, and is considered a sign of puberty.



Types of leucorrhea:[10]

Abnormal vaginal discharge

I.Non-infective

II. Non-purulent, Non-offensive, Non-irritant

a. Physiological
b. Cervical cause
c. Vaginal cause

III. Infective

Purulent, offensive, irritant

a. Specific
b. Non-specific

IV. Neoplastic and

V.Foreign body.

NON-INFECTIVE LEUCORRHEA:

Physiological cause:

The term "physiologic leukorrhea" is used to refer leukorrhea due to estrogen stimulation. Leukorrhea may occur normally during pregnancy. This is caused by increased bloodflow to the vagina due to increased estrogen. Female infants may have leukorrhea for a short time after birth due to their in-uterine exposure to estrogen.

Specific leucorrhea:

Any vaginal discharge which is frankly purulent and contains pus cells from which the causative organisms can be isolated and cultured should be considered as due to specific vaginal infection.

Specific vaginitis comprises of :

- Gonoccoccal
- Trichomonal
- Monilial
- Chlamydial and
- Bacterial vaginosis.

TRICHOMONIASIS[10]

Trichomoniasis is a sexually transmitted infection caused by a one-celled protozoan, a type of tiny parasite that travels between people during sexual intercourse. The incubation period between exposure and infection is unknown, but it's thought to range from five to 28 days.

Men who have trichomoniasis typically have no symptoms. Pregnant women who have trichomoniasis may be at higher risk of delivering their babies prematurely

Many women and most men with trichomoniasis have no symptoms, at least not at first.

Trichomoniasis signs and symptoms for women include:

- A profuse and often foul-smelling vaginal discharge — which may be white, gray, yellow or green
- Genital redness, burning and itching
- Pain with urination or sexual intercourse.

Risk factors include having:

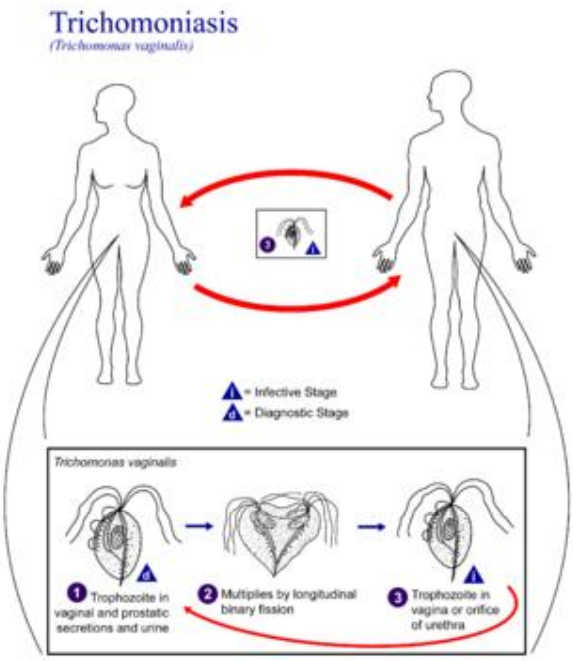
- Multiple sexual partners
- A history of other sexually transmitted infections
- A previous episode of trichomoniasis
- Having sex without a condom.

Pregnant women who have trichomoniasis may:

- Deliver prematurely
- Have a baby with a low birth weight
- Transmit the infection to the baby as he or she passes through the birth canal

Having trichomoniasis also appears to make it easier for women to become infected with HIV, the virus that causes AIDS.

LIFE CYCLE OF TRICHOMONIASIS



DIAGNOSIS:

There are three main ways to test for Trichomoniasis.

- The first is known as saline microscopy. This is the most commonly used method and requires an endocervical, vaginal, or penile swab specimen for examination under a microscope. The presence of one or multiple trichomonads constitutes a positive result. This method is cheap but has a low sensitivity (60-70%) often due to an inadequate sample, resulting in false negatives.
- The second diagnostic method is culture, which has historically been the "gold standard" in infectious disease diagnosis. Trichomonas Vaginalis culture tests are relatively cheap; however, sensitivity is still somewhat low (70-89%).
- The third method includes the nucleic acid amplification tests (NAATs) which are more sensitive. These tests are more costly than microscopy and culture, and are highly sensitive (80-90%).

TREATMENT:

Treatment for both pregnant and non-pregnant people is usually with metronidazole, by mouth once. Caution should be used in pregnancy, especially in the first trimester. Sexual partners, even if they have no symptoms, should also be treated.

For 95-97% of cases, infection is resolved after one dose of metronidazole. Studies suggest that 4-5% of trichomonas cases are resistant to metronidazole, which may account for some "repeat" cases. Without treatment, trichomoniasis can persist for months to years in women, and is thought to improve without treatment in men. Women living with HIV infection have better cure rates if treated for 7 days rather than with one dose.

PREVENTION:

Use of male condoms may help prevent the spread of trichomoniasis,[15] although careful studies have never been done that focus on how to prevent this infection. Infection with Trichomoniasis through water is unlikely because Trichomonas vaginalis dies in water after 45–60 minutes, in thermal water after 30 minutes to 3 hours and in diluted urine after 5–6 hours.[16]

Currently there are no routine standard screening requirements for the general U.S. population receiving family planning or STI testing.[17][18] The Centers for Disease Control and Prevention (CDC) recommends Trichomoniasis testing for females with vaginal discharge[19] and can be considered for females at higher risk for infection or of HIV-positive serostatus.[17]

The advent of new, highly specific and sensitive trichomoniasis tests present opportunities for new screening protocols for both men and women.[17][20] Careful planning, discussion, and research are required to determine the cost-efficiency and most beneficial use of these new tests for the diagnosis and treatment of trichomoniasis in the U.S., which can lead to better prevention efforts.[17][20]

A number of strategies have been found to improve follow-up for STI testing including email and text messaging as reminders of appointments.[21]

MONELIASIS[11]

Vulvovaginal candidiasis is the name often given to Candida albicans infection of the vagina associated with a **dermatitis** of the vulva (an itchy rash). 'Vaginal thrush', 'monilia', and vulvovaginal candidosis are also names used for Candida albicans infection.

CAUSES:

About 20% of non-pregnant women aged 15 to 55 harbour **Candida albicans** in the vagina. Most have no symptoms and it is harmless to them. Overgrowth of Candida albicans causes a heavy white curd-like vaginal discharge, a burning sensation in the vagina and vulva and/or an itchy rash on the vulva and surrounding skin.

Oestrogen causes the lining of the vagina to mature and to contain glycogen, a substrate on which Candida albicans thrives. Lack of oestrogen in younger and older women makes vulvovaginal candidiasis much less common.

Overgrowth of Candida albicans occurs most commonly with:

- Pregnancy
- Higher dose combined oral contraceptive pill and oestrogen-based hormone replacement therapy
- A course of broad spectrum antibiotics such as **tetracycline** or amoxiclav
- **Diabetes mellitus**
- **Iron deficiency anaemia**
- **Immunodeficiency** e.g., **HIV infection**
- On top of another skin condition, often **psoriasis**, **lichen planus** or **lichen sclerosus**.
- Other illness

Symptoms of vulvovaginal candidiasis, i.e., an overgrowth of *Candida* albicans, include:

- Itching, soreness and/or burning discomfort in the vagina and vulva
- Heavy white curd-like vaginal discharge

- Bright red rash affecting inner and outer parts of the vulva, sometimes spreading widely in the groin to include pubic areas, inguinal areas and thighs.

These may last just a few hours or persist for days, weeks, or rarely, months. Vulvovaginal candidiasis may recur just before each menstrual cycle (**cyclic vulvovaginitis**). Symptoms may sometimes be aggravated by sexual intercourse

.

DIAGNOSIS:

The doctor diagnoses the condition by inspecting the affected area and recognising typical clinical appearance. The pH of the discharge tends to be less than 4.5 and the diagnosis is often confirmed by a vaginal swab or vaginal smear. In recurrent cases the swab should be repeated after treatment to see whether Candida albicans is still present.

It is best to avoid treatment for four weeks prior to a swab to improve the chance of positive culture. Repeated self-sampling may be used if symptoms are not present at the time of medical examination. The doctor should provide swabs, completed laboratory forms, lab bags and instructions where to send or deliver the specimens.

Swab results can be misleading because the Candida albicans can be present without causing symptoms, and it can only be cultured if a certain amount is present. Swabs from outside the vagina can be negative, even when the yeast is present inside the vagina and there is a typical rash on the vulva. This is because the vaginal discharge has caused an **irritant dermatitis**, rather than the rash being directly due to infection.

In other cases, a different species of yeast i.e. a non-albicans candida is found. This is not likely to cause significant symptoms; researchers debate whether these yeasts cause disease or not. Antifungal agents may not clear non-albicans candida from the vagina but it tends to disappear in time by itself.

TREATMENT:

There are a variety of effective treatments for candidiasis. **Topical antifungal** pessaries or vaginal tablets containing clotrimazole or miconazole are usually recommended – in mild cases a single treatment is all that is necessary. A cream formulation may be preferred. **Oral antifungal** medicines containing **fluconazole** or **itraconazole** may be used if *Candida albicans* infection is severe or recurrent.

The creams can be used safely in pregnancy, but the tablets are best avoided.

Not all genital complaints are due to candida, so if treatment is unsuccessful it may because of another reason for the symptoms

RECURRENT CANDIDIASIS:[12]

Occasionally Candida albicans infection persists despite adequate conventional therapy. In some women this may be a sign of **iron deficiency**, **diabetes mellitus** or an immune problem, and appropriate tests should be done.

It is now thought that women who experience recurrent vulvovaginal *Candida albicans* do so because of persistent infection, rather than re-infection. The aim of treatment in this situation is therefore to avoid the overgrowth of candida that leads to symptoms, rather than necessarily being able to achieve complete eradication or cure.

There is some evidence that the following measures can be helpful:

- Cotton or moisture-wicking underwear and loose fitting clothing – avoid occlusive nylon pantyhose.
- Soaking in a salt bath. Avoid soap – use a **non-soap cleanser** or aqueous cream for washing.
- Apply **hydrocortisone cream** intermittently, to reduce itching and treat secondary **dermatitis** affecting the vulva.
- Treat with an antifungal cream before each menstrual period and before antibiotic therapy to prevent relapse.
- A prolonged course of a **topical antifungal** agent is occasionally warranted (but these may themselves cause **dermatitis** or result in proliferation of non-albicans candida).
- **Oral antifungal** medication (**itraconazole** or **fluconazole**) may be taken regularly and intermittently (e.g. once a month). The dose and frequency is quite variable, depending on the severity of symptoms. Oral antifungal agents may be unsuitable in pregnancy. They may require a prescription. In New Zealand, single dose fluclonazole is available over the counter at pharmacies.
- Boric acid (boron) 600mg as a suppository at night may help to acidify the vagina and reduce the presence of yeasts (albicans and non-albicans candida).

The following measures have not been shown to help:

- Treatment of sexual partner – males may get a brief skin reaction on the penis, which clears quickly with antifungal creams. Treating the male doesn't reduce the number of episodes of candidiasis in their female partner.
- Special low-sugar, low-yeast or high-yogurt diets
- Putting yogurt in the vagina
- Natural remedies (with the exception of boric acid).

MATERIALS AND METHODS

MATERIALS AND METHODS

Safety and Clinical evaluation of siddha drug **"PADIGARA PARPAM"** (Internal) in "**KIRUMI YONI ROGAM"**

Study Design

Study type: An Open Clinical trial

Study Place:

Ayothidass Pandithar Hospital (OPD),
National Institute of Siddha,
Tambaram sanatorium,
Chennai-47.

Study Period **:** 12 months

Sample size **:** 40 patients

Treatment

Drug	**:**	PADIGARA PARPAM (Internal) [2]
Dosage	:	1 kundri(130 mg) bid, after food.
Vehicle	:	Ghee
Duration of drug administration	:	24 days.

Standard Operating Procedure

Source of raw drug:

The required raw drug Padigaram was purchased from a well reputed indigenous drug shop.The raw drug was authenticated by the pharmacognosist in SCRI at Arumbakkam, Chennai. The raw drug will be purified and the medicine was prepared as per SOP in Gunapadam Laboratory of National Institute of Siddha.

Purification of raw drug:[2]

The following drug was purified as per the Siddha text GUNAPADAM THATHU-JEEVA VAGUPU, by Dr.Thiyagarajan, 5th edition,2009,pg-397.

PADIGARAM:(POTASH ALUM)

Padigaram was dissolved in RO water, filtered &boiled to a semisolid form and then cooled.

Method of Preparation PADIGARA PARPAM :

Ingredients:

- Purified Padigaram(POTASH ALUM) - 1 palam(35gms)
- Cow's butter - 1 palam(35gms)
- Cow's milk - q.s

Methodology:[2]

- Purified padigaram was placed inside the cow's butter in a suitable mud pot and was covered with a suitable mud plate, clay pasted cloth was applied to the junction of mudpot and plate & it was dried. Then it was subjected to calcination process with 10-15 cow dung cakes.
- Then the finished product was allowed to cool for sometime and finally it was powdered.

Drug Storage:

The prepared drug will be stored in a clean and dry air tight glass container.

Dispensing:

The parpam (130 mg) was given to the patient in a butter paper pack.

Subject selection:

Patients reporting at OPD of Maruthuvam with the symptoms of inclusion criteria will be subjected to screening test and documented using screening proforma.

Inclusion criteria:

- Age:21-45 yrs, married female
- Patient having the symptoms of profuse,thin,frothy whitish/Slightly greenish Discharge or curdy discharge per vagina
- Pruritis vulva, inflammation of the vulva, dysuria, lower abdominal pain,
- low backache, dyspaerunia
- Patient willing to cooperate for vaginal swab examination
- Patient willing to undergo routine blood investigation

- Positive -Wet test for Trichomonas vaginalis/KOH for fungus
- Patient willing to participate in trial and signing in consent form

Exclusion Criteria:

- H/O Diabetes mellitus
- H/O Bacterialvaginosis
- H/O Sexually transmitted disease (syphilis, HIV, gonorrhoea)
- H/O Non specific leucorrhea
- Pregnancy and lactation
- H/OMalignancy

Withdrawal Criteria:

- Intolerance to the drug and development of adverse reactions during the drug trial.
- Poor patient compliance & defaulters.
- Patients turned unwilling to continue in the course of clinical trial.
- Patient who will not take medication regularly.

TEST AND ASSESSMENTS:

A. Clinical assessment
B. Siddha assessment
C. Investigations

Clinical Assessment:[4]

- Profuse, thin, creamy whitish/greenish frothy or curdy discharge ,
- Pruritis vulva,
- Inflammation of the vulva
- Dysuria
- Lower abdominal pain,
- Low backache
- Dyspareunia

Siddha Assessment:

- Naadi (pulse perception)
- Sparisam(palpable perception)
- Naa(Tongue)
- Niram(complexion)
- Mozhi(voice)
- Vizhi(eyes)
- Malam(bowel habits)
- Moothiram(urine)
  - Neerkuri
  - Neikuri

Routine Tests and Investigations

Blood:

- Hb (gms/dl)
- Total RBC (million/cu.mm)
- Total WBC (cubic mm)
- Differential count :(%)
  - ✓ Polymorphs
  - ✓ Lymphocytes
  - ✓ Monocytes
  - ✓ Esinophils
  - ✓ Basophils
- ESR(mm/hr)
- **Blood sugar level -** Fasting (mg/dl)
  Post prandial (mg/dl)
  Random (mg/dl)

✓ **Lipid profile** - Total cholesterol (mg/dl)
  - HDL(mg/dl)
  - LDL (mg/dl)
  - VLDL (mg/dl)
  - TGL (mg/dl)

- **Renal function test** - Blood Urea (mg/dl)

Serum Creatinine (mg/dl)

Uric acid (mg/dl)

- **Liver function test**
  - Serum total bilirubin (mg/dl)
    - Direct bilirubin (mg/dl)
    - Indirect bilirubin (mg/dl)
    - SGOT (IU/L)
    - SGPT (IU/L)
    - Serum Alk.phosphotase (kingÅ units)
    - Serum calcium (mg/dl)
    - Serum phosphorus (mg/dl)
    - Total protein (mg/dl)
    - Serum albumin (mg/dl)
    - Serum globulin (mg/dl)
    - Serum fibrinogen (g/dl)

- **Urine**:
  - Albumin
  - Sugar (fasting and post prandial)
  - Deposits
  - Bile salts
  - Bile pigments Urobilinogen
- **Microbiology test :** VDRL

Specific Investigations :

VAGINAL SMEAR :

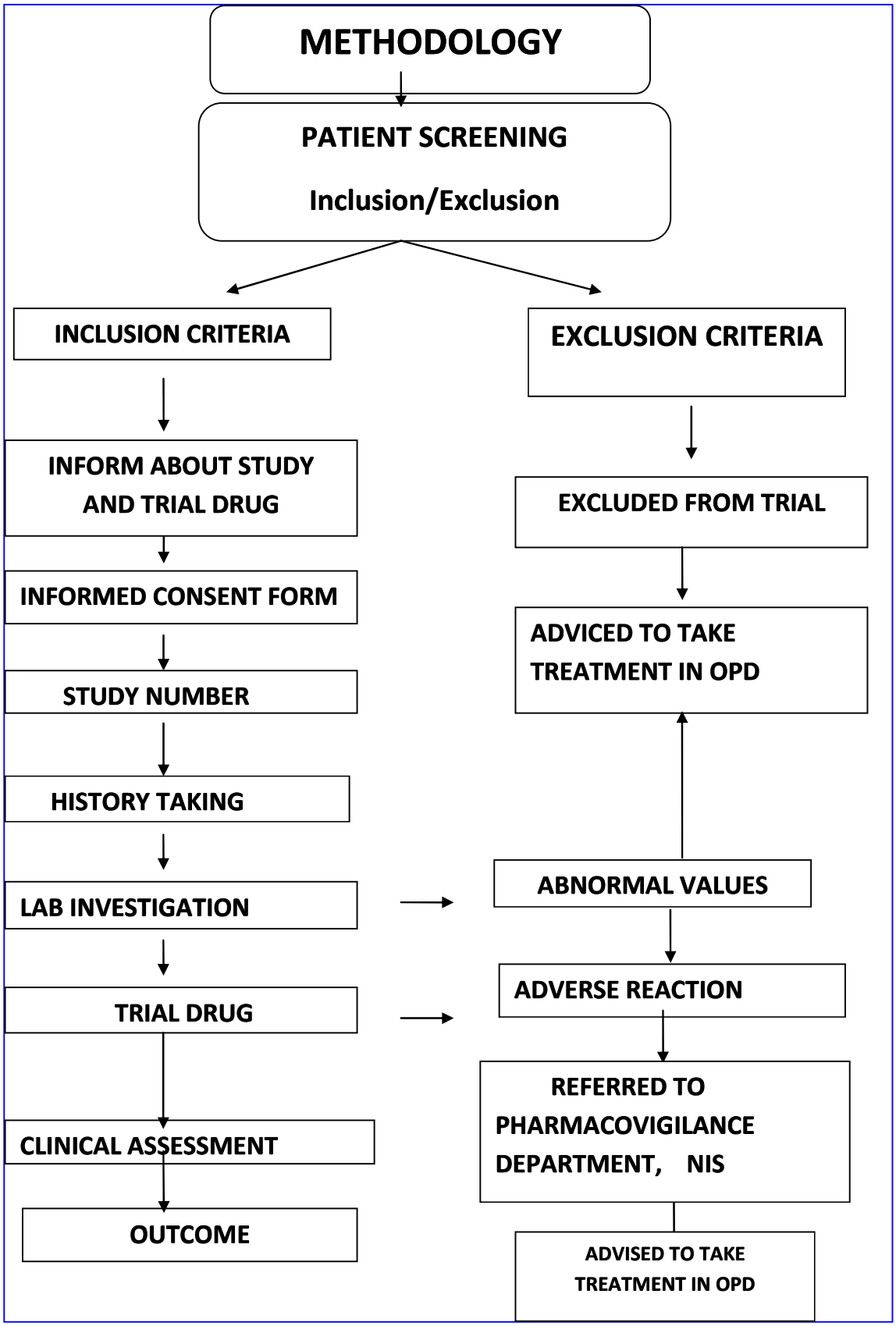
- Wet test for- TRICHOMONAS VAGINALIS.
- KOH for fungus

Data collection forms:

Required information was collected from each patient by using the following forms

Forms:

FORM l	**:**	Screening & Selection Proforma
FORM ll	**:**	Case Record form
FORM lll	**:**	Laboratory Investigation form
FORM IV	**:**	Drug compliance form
FORM V	:	Patient Information Sheet
FORM VI	**:**	Informed Consent Form
FORM VII	**:**	Withdrawal Form/ Adverse reaction form (Pharmacovigilance form)
FORM VIII	**:**	Dietary advice Form


METHODOLOGY
PATIENT SCREENING
Inclusion/Exclusion
INCLUSION CRITERIA
EXCLUSION CRITERIA
INFORM ABOUT STUDY AND TRIAL DRUG
EXCLUDED FROM TRIAL
INFORMED CONSENT FORM
ADVICED TO TAKE TREATMENT IN OPD
STUDY NUMBER
HISTORY TAKING
ABNORMAL VALUES
LAB INVESTIGATION
ADVERSE REACTION
TRIAL DRUG
REFERRED TO PHARMACOVIGILANCE DEPARTMENT, NIS
CLINICAL ASSESSMENT
OUTCOME
ADVISED TO TAKE TREATMENT IN OPD

Study Enrolment:

Patient reporting at the NIS, OPD with clinical features of whitsh or yellowish discharge per vagina, Pruritis vulva, vulval irritation, dysuria, abdominal pain, low backache are chosen for enrolment based on the inclusion criteria. The patients who are enrolled are informed about the study trial drug, possible outcomes and the objectives of the study in their own language and terms understandable to them and the informed consent would be obtained from them in the consent form.

Conduct of the Study

The day before starting trial drug **"PADIGARA PARPAM"** purgation will be given with **"MEGANATHA KULIGAI"** in ginger juice at morning empty stomach.The next day rest, third day onwards the trail drug PADIGARA PARPAM -130mg twice a day with ghee after food will be given continously for 24 days by the investigator in the OP department of Maruthuvam, NIS, Chennai. The patients was asked to have a regular treatment in the OP department once in 6 days. In every visit the clinical assessment was recorded in the prescribed Proforma (form no:II A). The laboratory investigation was done before and after treatment and recorded in the prescribed format (form no: III).For IP patients the drug had been provided & prognosis is noted daily. Routine laboratory investigations & vaginal smear was done on 0^{th} day& 24^{th} day.

At the end of the trial the patients were advised to come for follow up for 2 months for observation.

Data Management:

- After enrolling the patient in the study, a separate file for each patient was opened and all forms were filed in the file. Study No. and Patient No. were entered on the top of file for easy identification. Whenever the study patient visits OPD during the study period, the respective patient's file was taken and necessary recordings was made at the assessment form or other suitable forms.
- The screening forms were filed separately.

- The Data recordings were monitored for completion by Guide (HOD, Dept. of Maruthuvam), SRO (Statistics) and the adverse event was monitored by the members of the Pharmacovigilance department of NIS. All forms were further scrutinized in presence of Investigator by Sr.Research Officer (Statistics) for logical errors and incompleteness of data to avoid any bias. No modification in the results was permitted for unbiased reports.

OUTCOME

- **PRIMARY OUTCOME:**
  - It was assessed by the vaginal smear when wet test /KOH becomes negative for Trichomonas vaginalis/fungus after treatment & reduction of clinical symptoms.
- **SECONDARY OUTCOME:**
  - Socio economic status , Age related to the disease will be assessed.

Adverse effect and Serious effect Management:

If the trial patient develops any adverse reactions the patient was referred to the Pharmacovigilance department of NIS and documented. For any adverse effect the investigator will give the proper management in the OPD.

Ethical issues:

1. Informed consent was obtained from the patients after explaining about the clinical trial in an understandable language.
2. After the consent of the patient (through consent form) they were enrolled in the study.
3. Treatment was provided free of cost
4. No other medicines was used except the trial drug
5. Vaginal smear was performed in NIS clinical laboratory.
6. To prevent any infection, while collecting blood sample from the patient, only Disposable syringes, disposable gloves, with proper sterilization of lab equipments were used.

7. The data collected from the patient were kept confidentially. The patients were informed about the diagnosis, treatment and follow up.

8. The patients who were excluded (as per the exclusion criteria) given proper treatment with full care at OPD.

9. In conditions of treatment failure, adverse reactions patients were given alternative treatment at the OPD with full care through the end.

STATISTICAL ANALYSIS:

All data were entered into computer using MS Access software with macro for logical errors and manually cross checked for data entry error. Then the data were exported to STATA/SPSS software for univariate /multivariate analysis. Student 't' test and Mantel-Haenszel chi-square test was performed for determining the significance of a particular effect variable.

PREPARATION OF THE TRIAL DRUG

PREPARATION OF PADIGARA PARPAM

Ingredients:[2]

- **Padigaram (POTASH ALUM)- 1 palam(35gms)**
- **Cow's butter - 1 palam(35gms)**
- **Cow's milk - q.s**

Source of raw drug:

The required raw drug Padigaram was purchased from a well reputed indigenous drug shop. The raw drug was authenticated by the pharmacognosist SCRI in arumbakkam, Chennai. The raw drug was purified and the medicine was prepared as per SOP in Gunapadam Laboratory of National Institute of Siddha.

Purification of raw drug:[2]

The following drug was purified as per the Siddha text GUNAPADAM THATHU-JEEVA VAGUPU, by Dr.Thiyagarajan, 5th edition,2009,pg-397.

PADIGARAM:(POTASH ALUM)

It was dissolved in RO water, filtered & boiled to a semisolid form and then cooled.

Methodology:

- Purified padigaram was placed in cow's butter in a suitable mud pot and was covered with a suitable mud plate, clay pasted cloth was applied to the junction & it was dried.
- Then it was subjected to calcination process with 10-15 cow dung cakes.
- Then the finished product was allowed to cool for some time and finally it was powdered.

Drug Storage:

The prepared drug was stored in a clean and dry air tight glass container.

Dispensing:

The parpam (130 mg) was given to the patient in butter paper pack.

Dosage:

1 kundri(130 mg) bid, after food.

Vehicle:

Ghee

Duration of drug administration:

24 days.

Indications:

Utsoodu,vettai,neer erichal,ulluruppu ranam,baedhi,irumal.

Pathiyam:

Ichcha pathiyam

DRUG REVIEW

DRUG REVIEW

படிகாரம்:[3]

வேறு பெயர் :

சீனாக்காரம்,

படிகி,

சீனம்.

செய்கை:

துவர்ப்பி,

குருதிப்பெருக்கடக்கி,

அழுகலகற்றி,

புண்ணாக்கி,

இசிவகற்றி முதலியன ஆகும்.

இது மலத்தைக் கட்டும்.

பொது குணம்:[3]

"சீனமெனுங் காரமது சீறிவரு பல்லரணை
ஆனைக்கால் கண்ணோய் அனிலமொடு-மாநிலத்தில்
துன்மாங் கிசம்வாயு தோலாத உள்ளழலை
குன்மமிவை போக்குமெனக் கூறு"

(பொ-ள்) படிகாரத்தினால் பல்லரணை, யானைக்கால், கண்ணோய், நேத்திரவாயு, துர்மாமிச வளர்ச்சி, வாயு, உட் சூடு, குன்மம் முதலியன் நீங்கும்.

மற்றும் இது இரத்த பித்தநோய், இரத்தப்பெருக்கு, அதிசாரம், குழந்தைகளுக்கு காணும் வாந்தி, பேதி, கக்கிருமல், கபம்விழுதல், தொண்டைப்புண், ஈறுவிரணம், வெள்ளை, பெரும்பாடு முதலிய நோய்களையும் போக்கும்.

படிகி இரண்டு குன்றியை(260 மி.கி) ஆடாதோடைச் சாற்றில் நாள் ஒன்றுக்கு மும்முறை வீதம் கொடுத்துவர, பெண்களுக்குக்காணும் வெள்ளையும் அதனுடன்படுகின்ற உதிரமும் நிற்கும்.

PROPERTIES OF PADIGARAM

Chemical formula	$KAl(SO_4)_2 \cdot 12H_2O$
Molar mass	474.3884 g/mol
Appearance	white small crystals
Odor	watery metallic
Density	1.725 g/cm^3
Melting point	92 to 95 °C (198 to 203 °F; 365 to 368 K)
Boiling point	200 °C (392 °F; 473 K)
Solubility in water	14.00 g/100 mL (20 °C) 36.80 g/100 mL (50 °C)
Solubility	insoluble in acetone
Refractive index (n_D)	1.4564

வெண்ணெய் பொதுகுணம்[3]

"வெண்ணெயை யுண்டிட விந்துவைப் பெருக்கிமேற்
றண்ணென மெய்வலி தனக்குர மாகுமே"

(பொ-ரை) வெண்ணெயை உண்டால் தாதுவிர்த்தியையும், தேகத்திற்கு குளிர்ச்சியையும், பலத்தையும் உண்டுபண்ணும்.

பசு வெண்ணெய்க் குணம்:[3]

"கண்ணி லெழுநோயுங் கண்ணெரிவும் பீளையும்போ
மெண்ணும் பசியு மெழும்புங்காண்-நண்ணரிய
ஆவினறும் வெண்ணெய்க் ககலும்வன் மேகமெல்லாம்
பூவினர்க் கெல்லாம் புகல்"

(பொ-ரை) பசுவின் வெண்ணையால் கண்ணோய், கண்ணெரிச்சல், பீளை சாரல், பிரமேகம் இவை போம். பசியுண்டாம்.

Nutritional value of butter [15]

- Chemically butter fat consists essentially of a mixture of triglycerides, particularly those derived from fatty acids, such as palmitic, oleic, myristic, and stearic acids.
- Butter contains vitamins and minerals which include vitamin A, D, E, and K, as well as essential minerals like manganese, chromium, iodine, zinc, copper and selenium.

Butter as the following actions:

1.POWERFUL ANTIOXIDANT:

- Natural butter contains high levels of carotene,an unusual and essential nutrient for human beings.
- Carotene acts as an antioxidant,anti-infectious that boost our immune system.

2. ANTI-CANCER PROPERTIES:

- High levels of vitamin A and beta carotene lowers the chances of colorectal and prostate cancer.
- Conjugated Linoleic acid (CLA) has also been found in significant levels in butter and has been connected in studies as a cancer prevention method.

ஆவினது பாலின் பொதுக் குணம்[3]

"பாலர் கிழவர் பழஞ்சுரத்தோர் புண்ணாளி
சூலையர் மேகத்தோர் துர்பலத்தோர் ஏலுமிவர்
எல்லார்க்கு மாகும் இளைத்தவர்க்குஞ் சாதகமாய்
நல்லாய் பசுவின்பால் நாட்டு"

(பொ-ரை) பசுவின் பாலானது, குழந்தைகட்கும், கிழவர்கட்கும், பழை சுரம், புண், சுலை, பிரமேகம், துர்ப்பலம், மெலிவு ஆகிய இவைகளை உடையவர்களுக்கும் ஆகும் என்க.

Cow milk: [16]

- Milk provides essential nutrients and is an important source of dietary energy, high-quality proteins and fats.
- Milk can make a significant contribution to the required nutrient intakes for calcium, magnesium, selenium, riboflavin, vitamin B12 and pantothenic acid.
- Fat constitutes approximately 3 to 4 percent of the solid content of cow milk, protein about 3.5 percent and lactose 5 percent, but the gross chemical composition of cow milk varies depending on the breed.

PADIGARAM (Potash alum)

PURIFIED PADIGARAM

PADIGARAPARPAM

COW'S BUTTER

COW'S MILK

PHYSICO CHEMICAL ANALYSIS

சித்த மருத்துவ மைய அராய்ச்சி நிலையம், சென்னை - 600106
सिद्ध केंद्रीय अनुसन्धान संस्थान, अण्णा सरकारी अस्पताल परिसर, अरुम्बाक्कम, चेन्नई - 600106

SIDDHA CENTRAL RESEACH INSTITUTE

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19.04.2016

Name of the student: Dr. N. Elavarasi, III Year MD Student,
Department of Maruthuvam, National Institute of Siddha, Chennai-600 047.

PHYSICO-CHEMICAL ANALYSIS OF PADIKARA PARPAM

S.No	Parameter		Mean
1.	Loss on Drying at 105°C	:	4.39 %
2.	Total Ash	:	77.597 %
3.	Water soluble Ash	:	12.105 %
4.	Acid insoluble Ash	:	36.993 %
5.	pH	:	3.80

(R. Shakila)
Research Officer (Chemistry)

19/4/16
(Dr. P. Sathiyarajeswaran)
Assistant Director (Scientist 2) I/c

BIO CHEMICAL

ANALYSIS

BIO CHEMICAL ANALYSIS OF PADIGARA PARPAM

The biochemical analysis of Padigara parpam was done in Bio chemistry lab, National Institute of Siddha.

S.No	EXPERIMENT	OBSERVATION	INFERENCE
1.	Appearance of the sample	White in colour	
2.	**Test for Slicate** a. A 500mg of the sample was shaken well with distilled water. b. A 500 mg of the sample was shaken well with conc.Hcl/con.H2SO4	Sparingly soluble	**Presence of Silicate**
3.	**Action of Heat:** A small amount of the sample was taken in a dry test tube and heated gently at first and then strong.	No White fumes evolved. No brown fumes.	Absence of Carbonate Absence of Nitrate.
4.	**Flame Test:** A small amount of the sample was made into a paste with con. HCl in a watch glass and introduced into non-luminous part of the bunsen flame.	No bluish green flame appeared	Absence of copper
5.	**Ash Test:** A filter paper was soaked into a mixture of sample and cobalt nitrate solution and introduced into the bunsen flame and ignited.	No yellow colour flame appeared	Absence of sodium

Preparation of Extract:

5gm of Padigara parpam was weighted accurately and placed in a 250ml clean beaker and added with 50ml of distilled water. Then it was boiled well for about 10 minutes. Then it was cooled and filtered in a 100ml volumetric flask and made up to 100ml with distilled water. This preparation was used for the qualitative analysis of acidic/basic radicals and biochemical constituents in it.

S.No	EXPERIMENT	OBSERVATION	INFERENCE
	I. Test For Acid Radicals		
1.	**Test For Sulphate:** a.2ml of the above prepared extract was taken in a test tube to this 2ml of 4%dil. ammonium oxalate solution was added. b.2ml of the above prepared extract was added with 2ml of dil.Hcl until the effervescence ceases off. Then 2ml of Barium chloride solution was added.	Cloudy appearance present A white precipitate insoluble in con.Hcl was obtained	Absence of Sulphate Sulphate was not confirmed
2.	**Test For Chloride:** 2ml of the above prepared extracts was added with 2ml of dil.HCl was added until the effervescence ceases off. Then 2ml of silver nitrate solution was added	Cloudy appearance present.	**Presence of Chloride**
3.	**Test For Phosphate:** 2ml of the extract was treated with 2ml of dil.ammonium molybdate solution and 2ml of con.HN03	No Cloudy yellow appearance	Absence of Phosphate
4.	**Test For Carbonate:** 2ml of the extract was treated with 2ml dil. magnesium sulphate solution	No Cloudy appearance present	Absence of carbonate

5.	**Test For Nitrate:** 1gm of the extract was heated with copper turnings and concentrated H2SO4 and viewed the test tube vertically down.	No characteristic changes	Absence of nitrate
6.	**Test For Sulphide:** 1gm of the extract was treated with 2ml of con. HCL	No rotten egg smelling gas was evolved	Absence of sulphide
7.	**Test For Fluoride & Oxalate:** 2ml of extract was added with 2ml of dil. Acetic acid and 2ml dil.calcium chloride solution and heated.	No cloudy appearance.	Absence of fluoride and oxalate
8.	**Test For Nitrite:** 3drops of the extract was placed on a filter paper, on that 2 drops of dil.acetic acid and 2 drops of dil.benzidine solution were placed.	No characteristic changes	Absence of nitrite
9.	**Test For Borate:** 50mg of the extract was made into paste by using dil.sulphuric acid and alcohol (95%) and introduced into the blue flame.	No bluish green colour flame appeared	Absence of borate
II. **Test For Basic Radicals**			
1.	**Test For Lead:** 2ml of the extract was added with 2ml of dil.potassium iodine solution.	No Yellow precipitate was obtained.	Absence of lead
2.	**Test For Copper:** **a.** 50mg of extract was made into paste with con. HCl in a watch glass and introduced into the non-luminous part of the flame. **b.** 2ml of extract was added with excess of ammonia solution	No blue colour precipitate No blue colour precipitate	Absence of copper

3.	**Test For Aluminium:** To the 2ml of extract dil.sodium hydroxide was added in 5 drops to excess.	No characteristic changes	Absence of Aluminium
4.	**Test For Iron:** a. 2ml of extract was added with 2ml of dil.ammonium thiocyanate solution. b. To the 2ml of extract added 2ml of ammonium thiocyanate solution and 2ml of con.HNO3 was added.	No red colour appeared No blood red colour appeared	Absence of Iron Absence of Iron
5.	**Test For Zinc:** To 2ml of the extract dil.sodium hydroxide solution was added in 5drops to excess and dil.ammonium chloride was added.	NoWhite precipitate was formed	Absence of Zinc
6.	**Test For Calcium:** 2ml of the extract was added with 2ml of 4% dil.ammonium oxalate solution.	Cloudy appearance and white precipitate was formed	**Presence of calcium**
7.	**Test For Magnesium:** To 2ml of extract dil.sodium hydroxide solution was added in 5 drops to excess.	No White precipitate was obtained	Absence of magnesium
8.	**Test For Ammonium:** To 2ml of extract 1 ml of Nessler's reagent and excess of dil.sodium hydroxide solution were added.	No Brown colour appeared	Absence of ammonium
9.	**Test For Potassium:** 25mg of extract was treated with 2ml of dil.sodium nitrite solution and then treated with 2ml of dil.cobalt nitrate in 30% dil.glacial acetic acid.	No Yellow precipitate was obtained	Absence of potassium

10.	**Test For Sodium**: 50mg of the extract was made into paste by using HCl and introduced into the blue flame of bunsen burner.	No yellow colour flame evolved.	Absence of sodium
11.	**Test For Mercury**: 2ml of the extract was treated with 2ml of dil.sodium hydroxide solution.	No Yellow precipitate was obtained	Absence of Mercury
12.	**Test For Arsenic:** 2ml of the extract was treated with 2ml of dil.sodium hydroxide solution.	No Brownish red precipitate was obtained	Absence of arsenic.
III. **Miscellaneous**			
1.	**Test For Starch**: 2ml of extract was treated with weak dil.Iodine solution	No Blue colour developed	Absence of starch
2.	**Test For Reducing Sugar**: 5ml of Benedict's qualitative solution was taken in a test tube and allowed to boil for 2 minutes and add 8 to 10 drops of the extract then again boil it for 2 minutes. The colour changes were noted.	No Brick red colour was developed	Absence of reducing sugar
3.	**Test For The Alkaloids**: a) 2ml of the extract was treated with 2ml of dil.potassium Iodide solution. b) 2ml of the extract was treated with 2ml of dil.picric acid. c) 2ml of the extract was treated with 2ml of dil.phospho tungstic acid.	No Yellow colour	Absence of Alkaloid
4.	**Test For Tannic Acid:** 2ml of extract was treated with 2ml of dil.ferric chloride solution	No black precipitate was obtained	Absence of Tannic acid

5.	**Test For Unsaturated Compound**: To the 2ml of extract 2ml of dil.Potassium permanganate solution was added.	Potassium permanganate was not decolourised	Absence of unsaturated compound
6.	**Test For Amino Acid**: 2 drops of the extract was placed on a filter paper and dried well. 20ml of Burette reagent was added.	No violet colour	Absence of amino acid

RESULTS:

Silicate, Chloride, Calcium are present in padigara parpam.

ICP-OES AND SEM

ICP-OES AND SEM REPORTS OF PADIGARA PARPAM

Padigara Parpam

(wt:0.20155g)

Al 396.152	4.025 mg/L
As 188.979	BDL
Ca 315.807	02.360 mg/L
Cd 228.802	BDL
Cu 327.393	BDL
Hg 253.652	BDL
K 766.491	123.821 mg/L
Mg 285.213	01.304 mg/L
Na 589.592	04.310 mg/L
Ni 231.604	BDL
Pb 220.353	BDL
P 213.617	16.341 mg/L
S 180.731	21.324 mg/L

ICP-OES

Emission spectrometry is based on the principle that atoms or ions in an excited state tend,to revert back to the ground state and in so doing emit characteristic wavelength and intensity of that light is proportional to the concentration of that particular element in the sample solution

Sample Required

Sample required is about 10-20mg for solids and approximately 25ml for liquids.Samples should be non-explosive and non-corrosive.

Application

This technique is used for quantitative and qualitative determination of the metals and metalloids in the following sample.

Biological	Geological
Enviromental	Pharmaceutical
Industrial	Aqueous and Organic

F E I Quanta FEG 200 - High Resolution Scanning Electron Microscope

The Quanta 200 FEG scanning electron microscope (SEM) is a versatile high resolution scanning electron microscope with three modes of operation, namely, the high vacuum (HV) mode for metallic (electrically conducting) sample, low vacuum (LV) and environment scanning electron microscope (ESEM) modes for insulating, ceramic, polymeric (electrically insulating) and biological samples respectively. Apart from giving the high resolution surface morphological images, the Quanta 200 FEG also has the analytical capabilities such as detecting the presence of elements down to boron (B) on any solid conducting materials through the energy dispersive X-ray spectrometry (EDX) providing crystalline information from the few nano meter depth of the material surface via electron back scattered detection (BSD) system attached with microscope and advanced technological PBS (WDS) for elemental analysis.

Resolution: 1.2 nm gold particle separation on a carbon substrate
Magnification: From a min of 12x to greater than 1, 00,000 X

APPLICATION INCLUDE

Materials evaluation

- Grain size
- Particle size distributions
- Material homogeneity
- Inter metallic distribution

Failure analysis

- Contamination location
- Mechanical damage assessment
- Micro-crack location

Quality Control screening

- “Good” to “bad” sample
- comparison
- Dimension verification
- Gate width measurement

Sample required

General Size:. Any dimension (Height or Diameter): Less than 10 mm. The ideal shape of a sample is that of a button on your shirt. However, other sizes can also be accommodated only after a discussion with the system operator.

Conductivity (Electrical):Conducting or at least semiconducting. If sample is not electrically conducting, it will require silver or gold coating. If the sample is a powder, make a normal button size pellet of the powder. If the sample is insulator or polymeric or electrically non-conducting it needs to be coated with carbon.

Results and Interpretation of SEM analysis:

The morphology of the Padigara parapam drug can be determined by SEM (FEI Quanta). A representative portion of each sample must be sprinkled onto a double side carbon tape and mounted on aluminium stubs, in order to get a higher quality secondary electron image for SEM examination. We have observed from SEM photographs that particles are spherical in shapes and sizes are in the range from 0.5 micron to 4 microns. Although the particle sizes of different batches showed similarity, it seems that these particles are aggregates of much smaller particles. When dispersed in an aqueous medium, these preparations form a negatively charged hydrophobic particle suspension. This hydrophobicity gives these particles a tendency to aggregate together to form larger particles. This parpam exhibited larger sizes and agglomeration of the particles. Therefore, the comparatively larger size may be due to the agglomeration of the particles by repeated cycles of calcinations involved in preparation.

TOXICITY STUDIES

- ACUTE TOXICITY
- REPEATED DOSE 28 DAYS ORAL TOXICITY

ACUTE ORAL TOXICITY – OECD GUIDELINES – 423

Acute toxicity study was carried out as per OECD guideline (Organization for Economic Co - operation and Development, Guideline-423

Animal : Healthy Wistar albino female rat weighing 180–220 gm

Studied carried out at three female rat under fasting condition, signs of toxicity was observed for every one hour for first 24 hours and every day for about 14 days from the beginning of the study.

INTRODUCTION:

The acute toxic class method is a stepwise procedure with the use of 3 animals of a single sex per step. Depending on the mortality and/or the moribund status of the animals, on average 2-4 steps may be necessary to allow judgment on the acute toxicity of the test substance. Morbid animals or animals obviously in pain or showing signs of severe and enduring distress shall be humanely killed, and are considered in the interpretation of the test results in the same way as animals that died on test. The method allows for the determination of an LD50 value only when at least two doses result in mortality higher than 0% and lower than 100%.

PRINCIPLE:

It is the principle of the test that based on a stepwise procedure with the use of a minimum number of animals per step, sufficient information is obtained on the acute toxicity of the test substance to enable its classification. The substance is administered orally to a group of experimental animals at one of the defined doses. The substance is tested using a stepwise procedure, each step using three animals of a single sex. Absence or presence of compound-related mortality of the animals dosed at one step will determine the next step, i.e.; − no further testing is needed − dosing of three additional animals with the same dose − dosing of three additional animals at the next higher or the next lower dose level. The method will enable a judgment with respect to classifying the test substance to one of a series of toxicity classes.

METHODOLOGY

Selection of animal species:

The preferred rodent species is rat, although other rodent species may be used. Healthy young adult animals of commonly used laboratory strain Swiss albino is used . Females should be nulliparous and non-pregnant. Each animal at the commencement of its dosing should be between 8 and 12 weeks old and its weight should fall in an interval within±20 % of the mean weight of the animals.

Housing and feeding conditions:

The temperature in the experimental animal room should be 22ºC (+3ºC). Although the relative humidity should be at least 30% and preferably not exceed 70% other than during room cleaning the aim should be 50-60%. Lighting should be artificial, the sequence being 12 hrs light, 12 hrs dark. For feeding, conventional laboratory diets may be used with an unlimited supply of drinking water. Animals may be grouped and tagged by dose, but the number of animals per cage must not interfere with clear observations of each animal.

Preparation of animals:

The animals are randomly selected, marked to permit individual identification, and kept in their cages for at least 7 days prior to dosing to allow for acclimatization to the laboratory conditions.

Observation done:

Parameters	Observations
Body weight	Normal
Assessments of posture	Normal
Signs of Convulsion Limb paralysis	Absence of sign (-)
Body tone	Normal

Lacrimation	Absence
Salivation	Absence
Change in skin color	No significant colour change
Piloerection	Normal
Defecation	Normal
Sensitivity response	Normal
Locomotion	Normal
Muscle grip ness	Normal
Rearing	Mild
Urination	Normal

Dose mg/kg	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
2000	+	-	-	-	-	+	-	-	-	-	-	+	-	+	-	-	-	-	-	-

1. Alertness 2.Aggressiveness 3. Pile erection 4. Grooming 5.Gripping 6. Touch Response 7. Decreased Motor Activity 8.Tremors 9 Convulsions 10. Muscle Spasm 11. Catatonia 12.Musclerelaxant 13.Hypnosis 14.Analgesia15.Lacrimation 16. Exophthalmos 17. Diarrhea 18. Writhing 19 Respiration 20. Mortality.

Acute toxicity:

In the acute toxicity study, the rats were treated with different concentration of P. Parpam from the range of 5mg/kg to 2000mg/kg which did not produce signs of toxicity, behavioral changes, and mortality in the test groups as compared to the controls when observed during 14 days of the acute toxicity experimental period. These results showed that a single oral dose of the extract showed no mortality of these rats even under higher dosage levels indicating the high margin of safety of this extract. In acute toxicity test compound P.Parpam was found to be non toxic at the dose level of 2000mg/ kg body weight.

Repeated dose 28-day sub-acute oral toxicity study of P.Parpam on rats (OECD – 407 guidelines)

Sub-acute toxicity studies were carried out according to OECD 407 and rats were divided into 3 groups of 10 animals (5 male and 5 female). Group I served as control treated with normal saline and Group-II and III were treated with *P.Parpam* at the dose of 200 & 400 mg/kg/day for 28 days. The toxic symptoms such as signs of toxicity, mortality and body weight changes were monitored. Rats were anesthetized with ether at the end of the treatment period. All rats were sacrificed after the blood collection.

Sub acute toxicity

The dose selected for the sub acute toxicity study was 200mg, 400mg/kg. All the animals were free of intoxicating signs throughout the dosing period of 28 days. No physical changes were observed throughout the dosing period. No mortality was observed during the whole experiment. No significant changes were observed in the values of different parameters studied when compared with controls and values obtained were within normal biological and laboratory limits. The weights of organs recorded did not show any significant differences in the treatment and the control group indicating that P. Parpam was not toxic to kidney, liver, spleen, brain There was no significant changes were observed in hemoglobin (Hb), red blood cell (RBC), white blood cell (WBC), packed cell volume (PCV), Erythrocyte sedimentation rate (ESR) in all the treated groups as compared to respective control groups.

Histopathology:

Histopathological investigation of the vital organs was done. The organ pieces (3-5µm thick) were preserved and were fixed in 10% formalin for 24 h and washed in running water for 24 h. Samples were dehydrated in an auto technicon and then cleared in benzene to remove absolute alcohol. Embedding was done by passing the cleared samples through three cups containing melted paraffin at 50°C and then in a cubical block of paraffin made by the “L” moulds. It was followed by microtome and the slides were stained with Haematoxylin-eosin.

The organs included brain, heart, kidneys, liver and lungs of the animals were preserved they were subjected to histopathological examination.

Statistical analysis:

Findings such as clinical signs of intoxication, body weight changes, food consumption, and hematology and blood chemistry were subjected to one-way Anova. Followed by dunnet't' test using a computer software programme. (GraphPad Prism 5.0

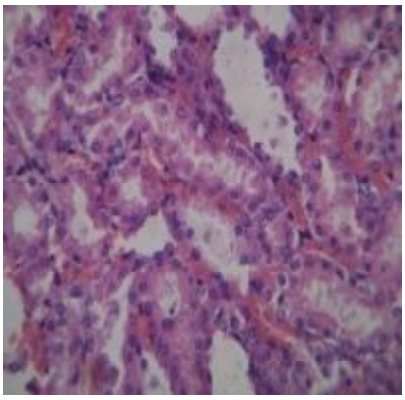
Change in body weight

Treatment	0th day	7th day	14th day	21st day	28th day
Control	185.13±2.44	188.50±4.28	194.83±12.46	198.84±4.34	207.46±8.41
100mg/kg	183.86±1.32	190.33±4.60	194.33±16.08	201.83±4.61	209.46±12.45
200mg/kg	178.83±3.50	180.66±9.74	183.50± 7.58	192.01±14.56	196.43±7.59

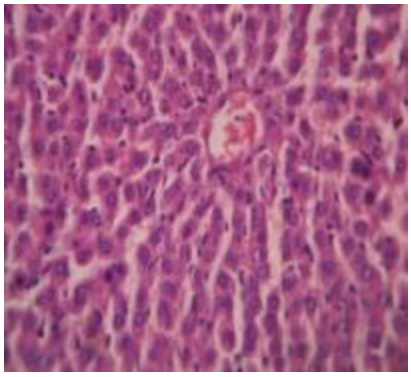
Organ Weight

Dose	**Relative Organ Weight of rats (gm)**			
	Liver	**Kidney**	**Brain**	**Spleen**
Control	2.72±0.2	0.68±0.12	0.48±0.02	0.18±0.14
100mg/kg	2.86±0.1	0.64±0.12	0.41±0.01	0.14±0.72
200mg/kg	2.76±0.1	0.67±0.13	0.49±0.01	0.19±0.76

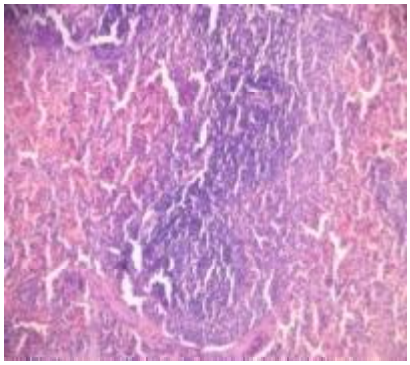
Kidney



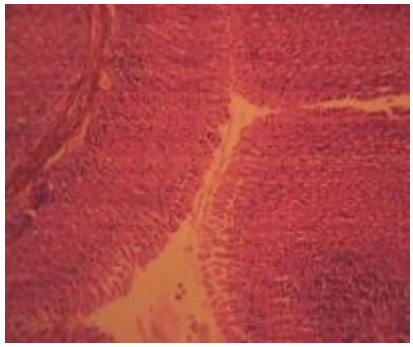
Liver



Spleen



Brain



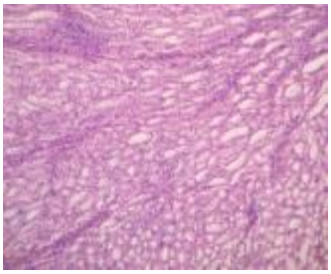
- Photomicrograph of liver tissue of control rats showing normal hepatic cells with central vein (CV) and sinusoidal dilation (S).
- Kidneys cells showed normal histological architecture and the presence of small number of resident lymphocytes in the portal connective stroma.
- Spleen cells showing normal histology expanded white pulp, red pulp and central arteriole
- Brain -The segment of cerebellum, with the normal architecture indicating no structural changes

Haematological parameter	Control	P.Parpam	
		200mg/kg	400mg/kg
Total R.B.C. count ($\times 10^6$ mm−3).	8.83±0.08	8.60±0.11	8.56±0.18
Total W.B.C. Count ($\times 10^3$ mm−3).	11.80±0.46	11.27±0.37	11.60±0.23
Haemoglobin (Hb) (g/dl)	15.67±0.24	15.37±0.21	15.63±0.31
Hematocrit (%).	41.00±0.57	39.67±0.88	38.67±0.73
Platelets (×103 mm−3).	850.0±13.11	865.3±3.52	871.7±4.410
Lymphocytes(%).	82.67±1.76	73.33±2.40	80.00±1.15
Neutrophils (%).	22.00±1.15	18.73±0.93	19.93±0.24

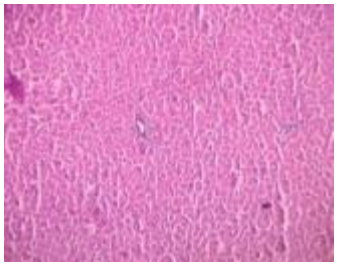
Biochemical Parameters

Biochemical parameter	Control	P.Parpam	
		200 mg/kg	400mg/kg
Creatinine (mg/dl)	0.63± 0.07	0.68± 0.06	0.59± 0.16
Urea (mg/dl)	15.67± 1.20	16.60± 0.87	14.87± 0.75
Triglycerides (mg/dl)	46.33± 0.88	52.33± 1.45	48.00± 1.155
Total Cholesterol (mg/dl)	42.00± 2.30	50.67± 2.40	49.33± 1.453
Total protein (mg/dl)	4.00± 0.41	3.93± 0.08	4.03± 0.21
Albumin (g/dl)	2.43± 0.32	2.573± 0.11	2.40± 0.25
AST (IU/L)	118.3± 1.45	99.00± 1.52	108.0± 5.03
ALT (IU/L)	64.00± 2.30	56.00± 1.08	60.00± 1.15
ALP (IU/L)	180.7± 1.76	151.7± 3.38	157.0± 7.93

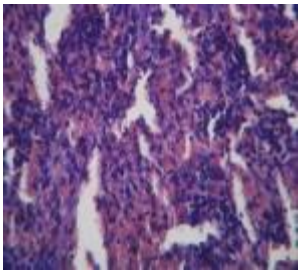
Kidney



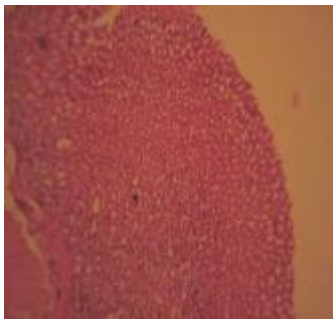
Liver



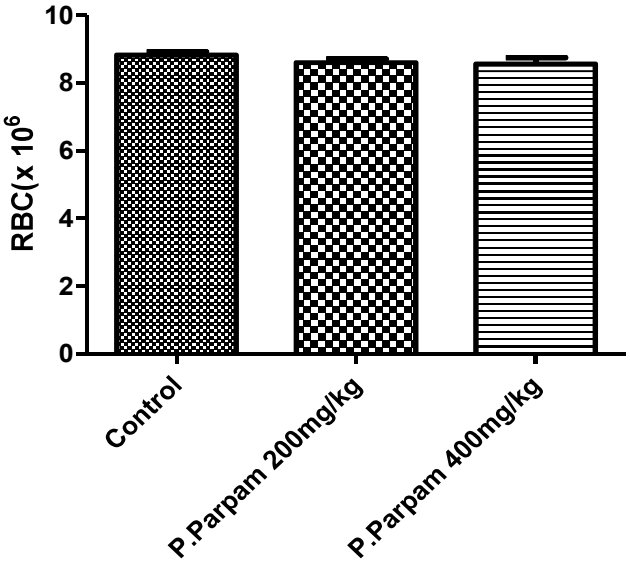
Spleen

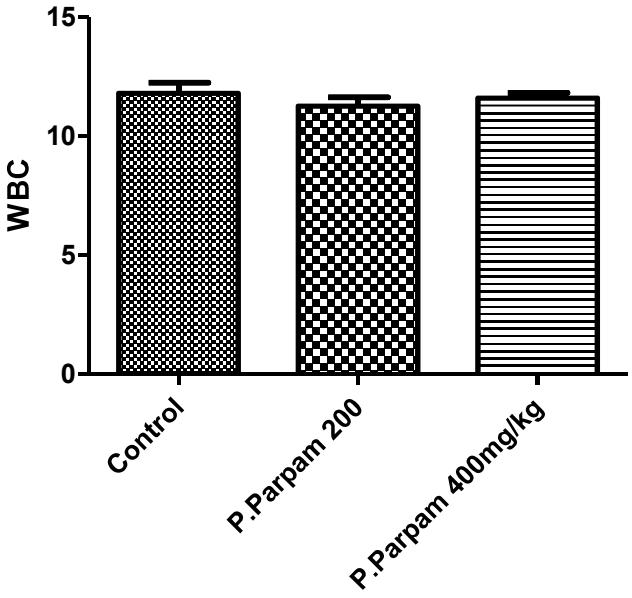


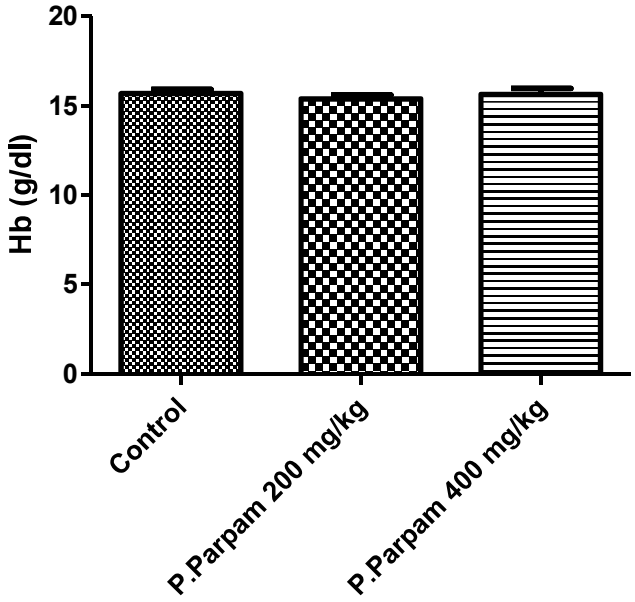
Brain

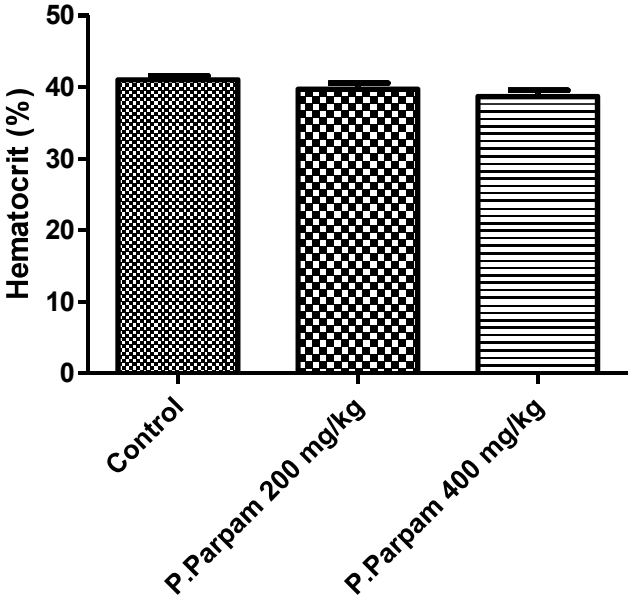


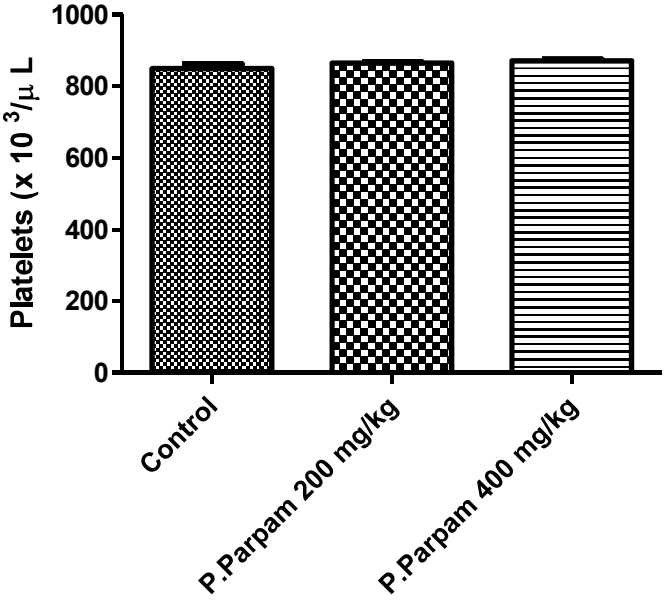
- Normal liver cells with hepatocyte , central vein and portal triad .
- Kidneys cells showed less number of degenerated cells
- Spleen cells showing normal histology white pulp, red pulp and central arteriole
- Brain cells with mild degeneration in the cortex.

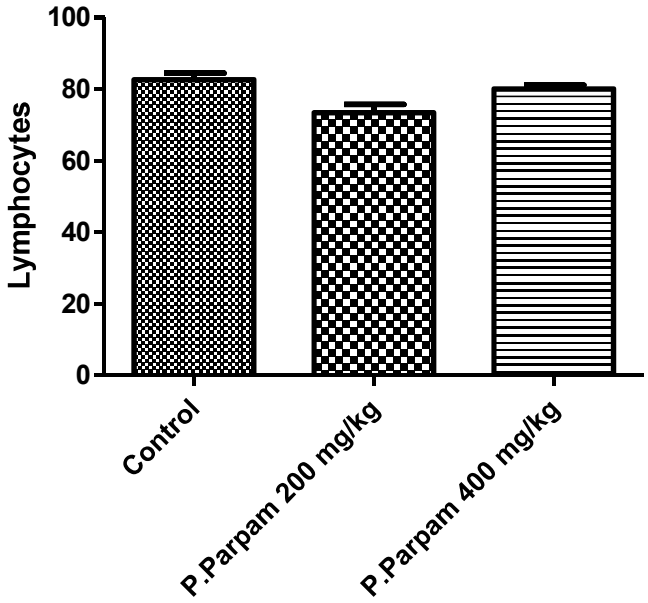


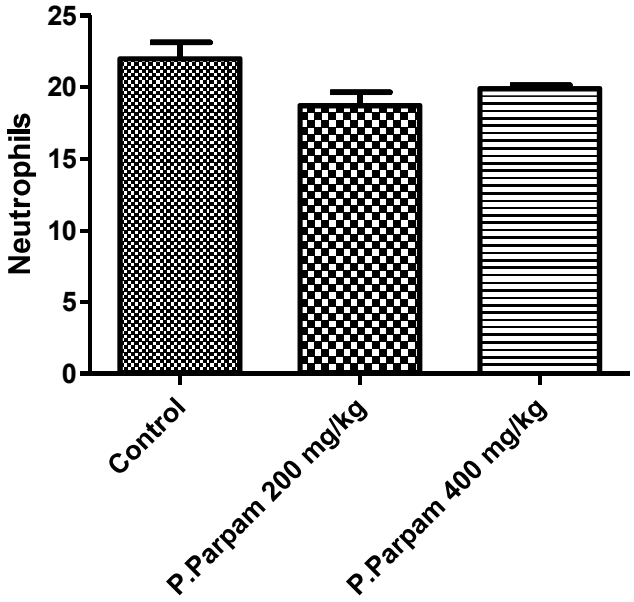

WBC
15
10
5
0
Control
P.Parpam 200
P.Parpam 400mg/kg

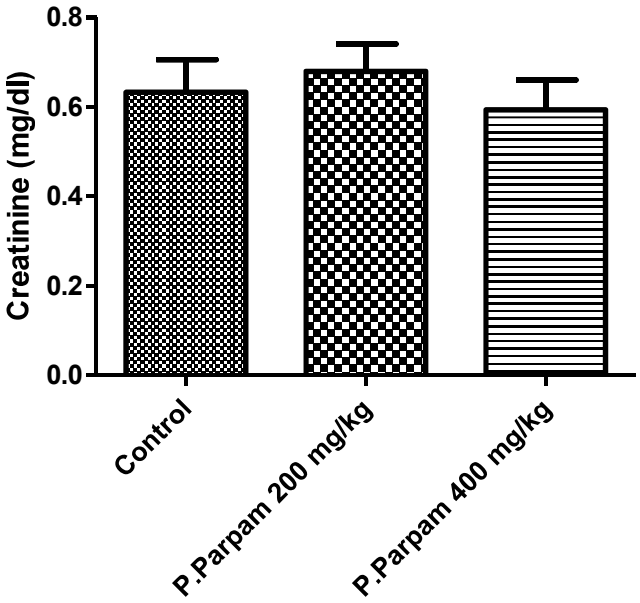

Hb (g/dl)
20
15
10
5
0
Control
P.Parpam 200 mg/kg
P.Parpam 400 mg/kg

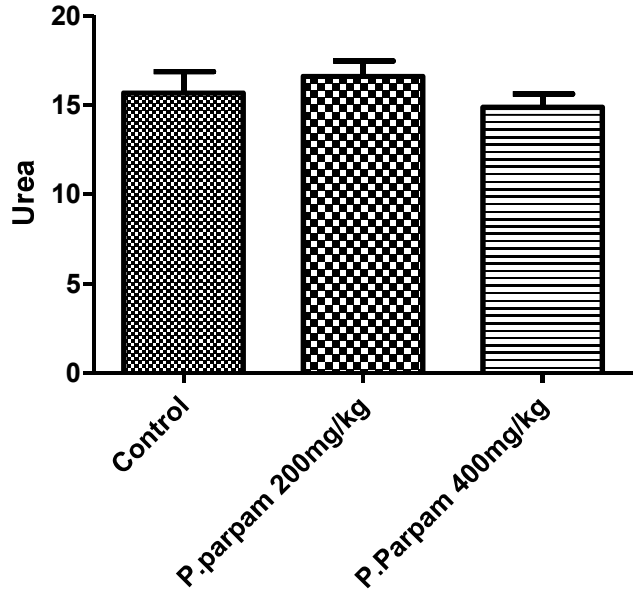

Hematocrit (%)
50
40
30
20
10
0
Control
P.Parpam 200 mg/kg
P.Parpam 400 mg/kg

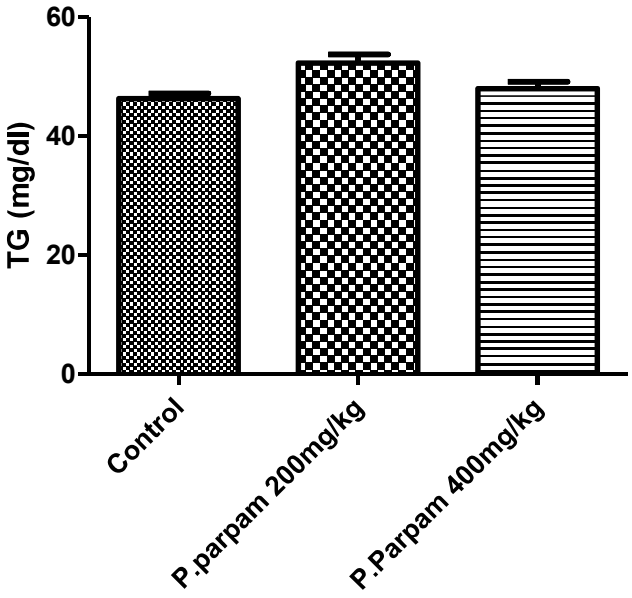

Platelets (x 10 3/μ L
1000
800
600
400
200
0
Control
P.Parpam 200 mg/kg
P.Parpam 400 mg/kg

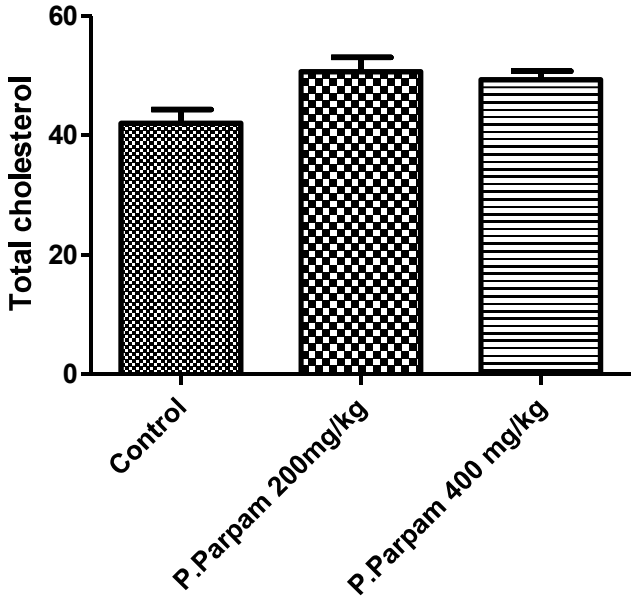

Lymphocytes
100
80
60
40
20
0
Control
P.Parpam 200 mg/kg
P.Parpam 400 mg/kg

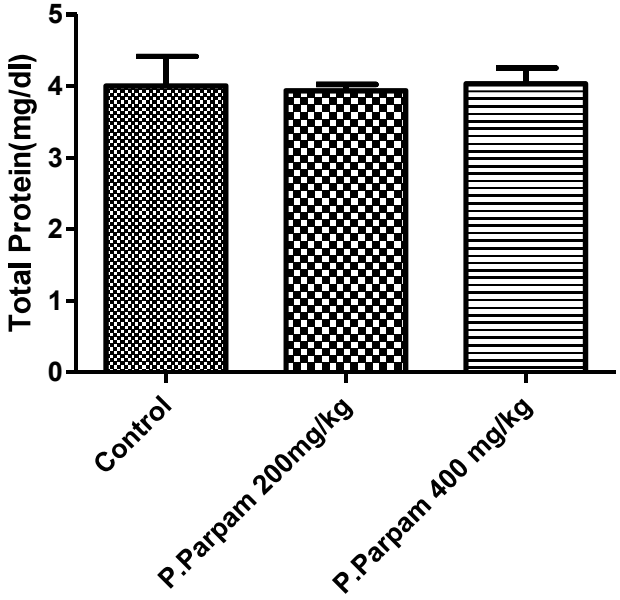

Neutrophils
25
20
15
10
5
0
Control
P.Parpam 200 mg/kg
P.Parpam 400 mg/kg

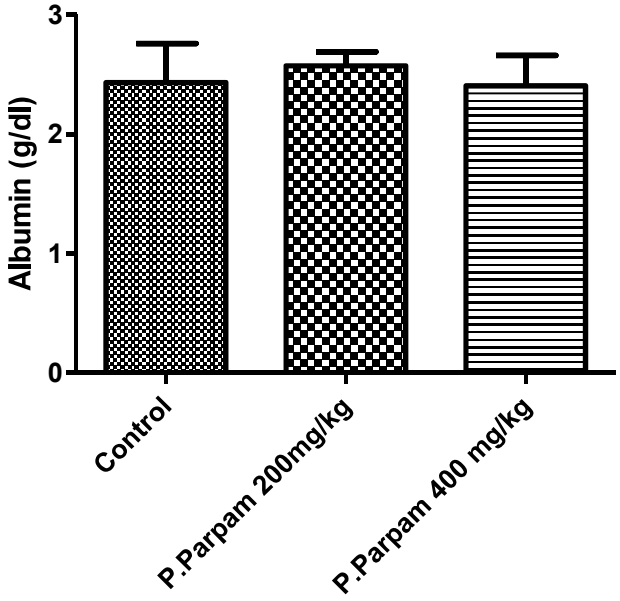

Creatinine (mg/dl)
0.8
0.6
0.4
0.2
0.0
Control
P.Parpam 200 mg/kg
P.Parpam 400 mg/kg

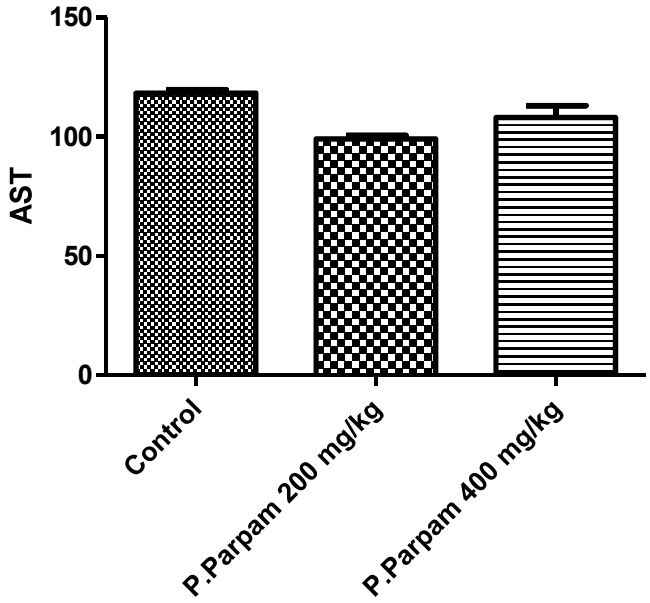

Urea
20
15
10
5
0
Control
P.parpam 200mg/kg
P.Parpam 400mg/kg

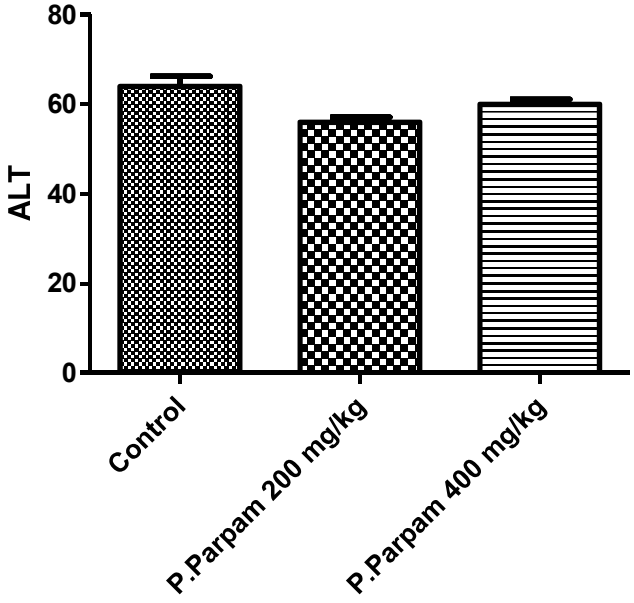

60
40
20
0
TG (mg/dl)
Control
P.parpam 200mg/kg
P.Parpam 400mg/kg

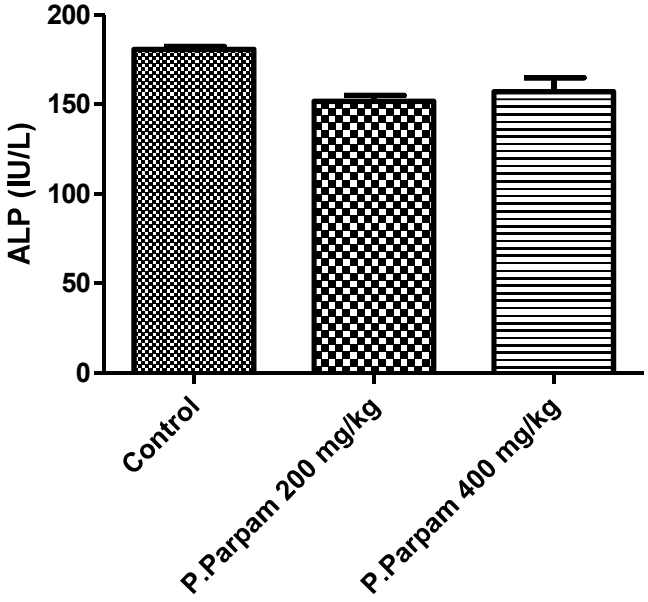

60
40
20
0
Total cholesterol
Control
P.Parpam 200mg/kg
P.Parpam 400 mg/kg


Total Protein(mg/dl)
5
4
3
2
1
0
Control
P.Parpam 200mg/kg
P.Parpam 400 mg/kg


Albumin (g/dl)
3
2
1
0
Control
P.Parpam 200mg/kg
P.Parpam 400 mg/kg


150
100
50
0
AST
Control
P.Parpam 200 mg/kg
P.Parpam 400 mg/kg


80
60
40
20
0
ALT
Control
P.Parpam 200 mg/kg
P.Parpam 400 mg/kg


200
150
100
50
0
ALP (IU/L)
Control
P.Parpam 200 mg/kg
P.Parpam 400 mg/kg

OBSERVATION

AND

RESULTS

OBSERVATION AND RESULTS

For the clinical study 40 out patients were selected and treated in OPD No 1, Department of Maruthuvam, Ayothidoss pandithar Hospital, National Institute of Siddha,Chennai-47.

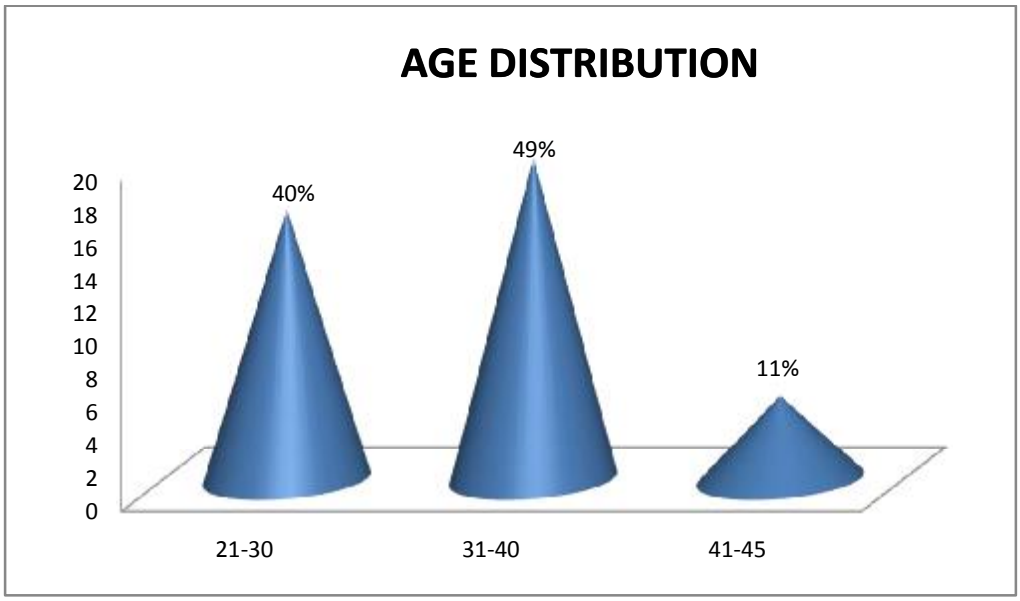
Results were observed with respect to the following criteria.

1. Age distribution
2. Food habits
3. Family history
4. Socio-economic status
5. Gunam
6. Paruva kalam (season)
7. Thinai
8. Kosangal
9. Ezhu udal thathukkal
10. Vatham
11. Pitham
12. Kabam
13. Clinical manifestations
14. Chronicity of illness
15. Results

1. AGE DISTRIBUTION:

Table 1:

AGE	No of patients	Percentage
21-30	16	40%
31-40	19	49%
41-45	5	11%



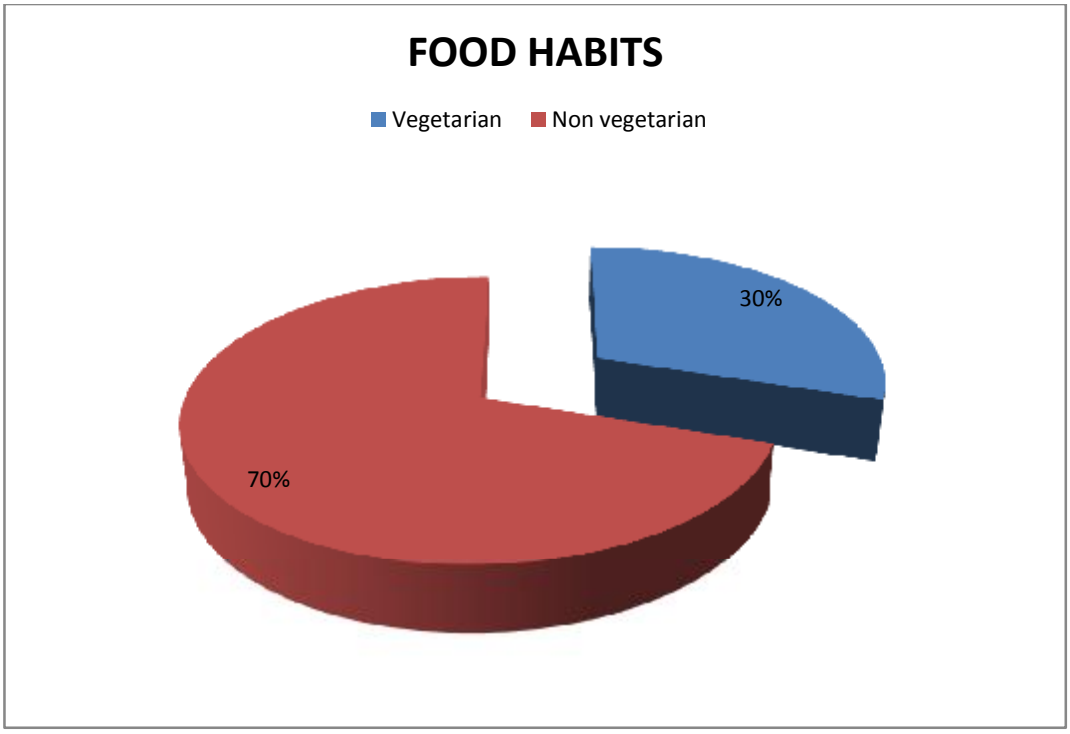
INFERENCE:

21-30 age group were 40% (16 cases), 31-40 age group were 49% (19 cases), 41-45 age group were 11% (5 cases)

2. FOOD HABITS:

Table 2:

Food habits	No. of patients	Percentage (%)
Vegetarian	12	30%
Non vegetarian	28	70%



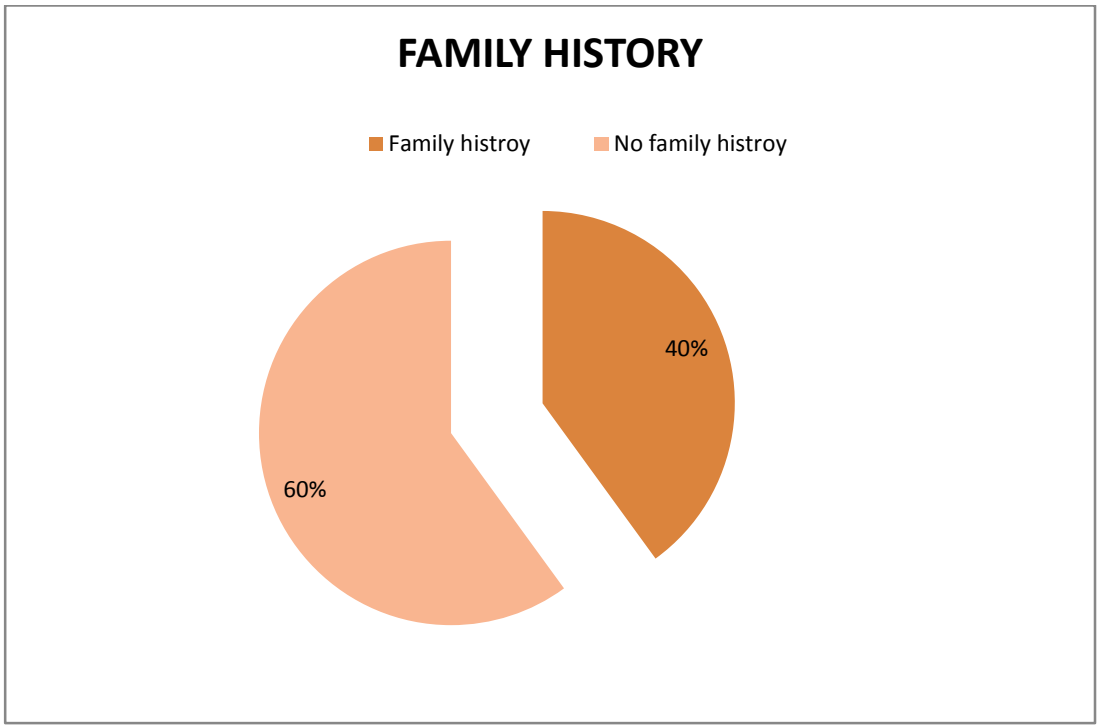
INFERENCE:

Non vegetarian (70%) are more prone to Kirumi Yoni Rogam than vegetarian (30%).

3. FAMILY HISTORY:

Table 3:

	Family history	**No family history**
No of patients	16	24
Percentage	40%	60%



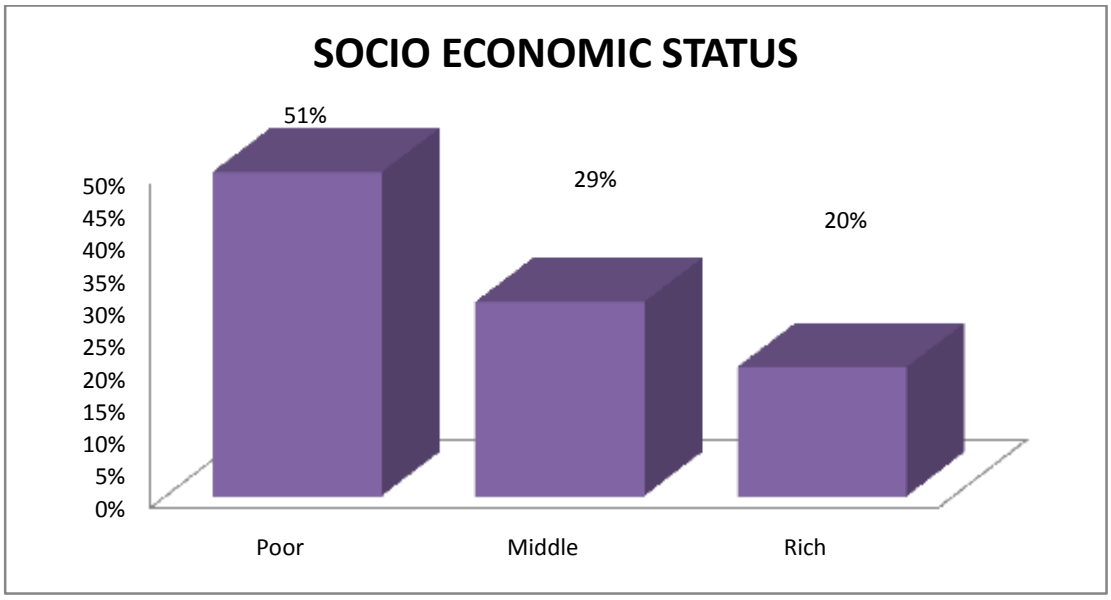
INFERENCE:

Among 40 patients 40% of cases (16) had a family history of kirumi yoni rogam and 60% of cases (24) had no family history.

3. SOCIO ECONOMIC STATUS:

Table 4:

S.no	Economic status	No of cases	Percentage (%)
1.	Poor	21	51%
2.	Middle	11	29%
3.	Rich	8	20%
	Total	40	100%



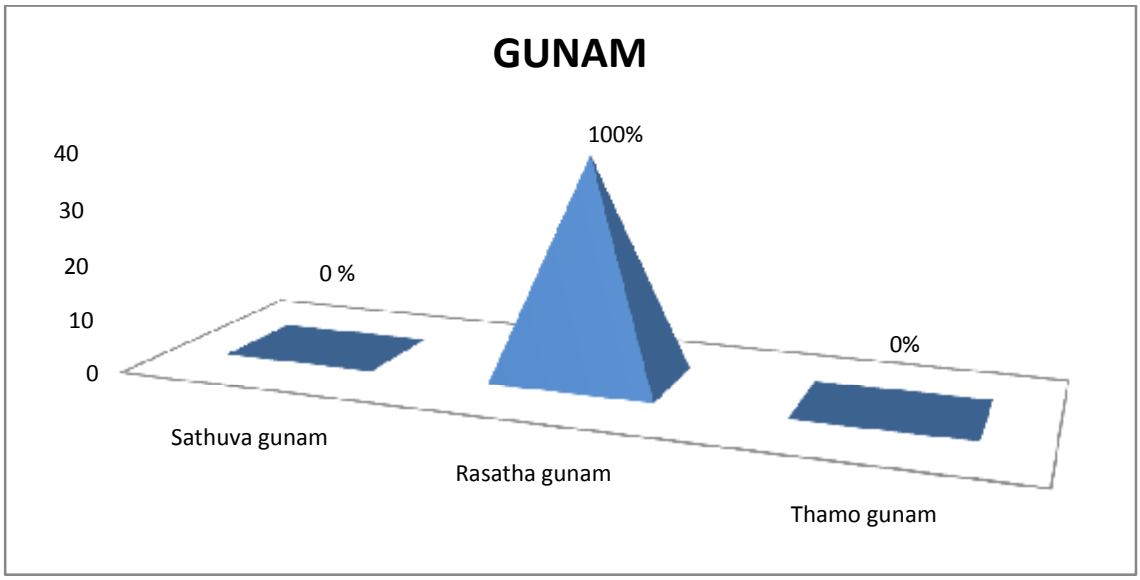
INFERENCE:

Among 40 patients 51% of cases (21) were under poor socio-economic status, 29% of cases (11) were from middle class family and 20% of cases (8) were from rich.

5. GUNAM:

Table 5:

Gunam	No of patients	Percentage **(%)**
Sathuva gunam	0	0%
Rasatha gunam	40	100%
Thamo gunam	0	0%



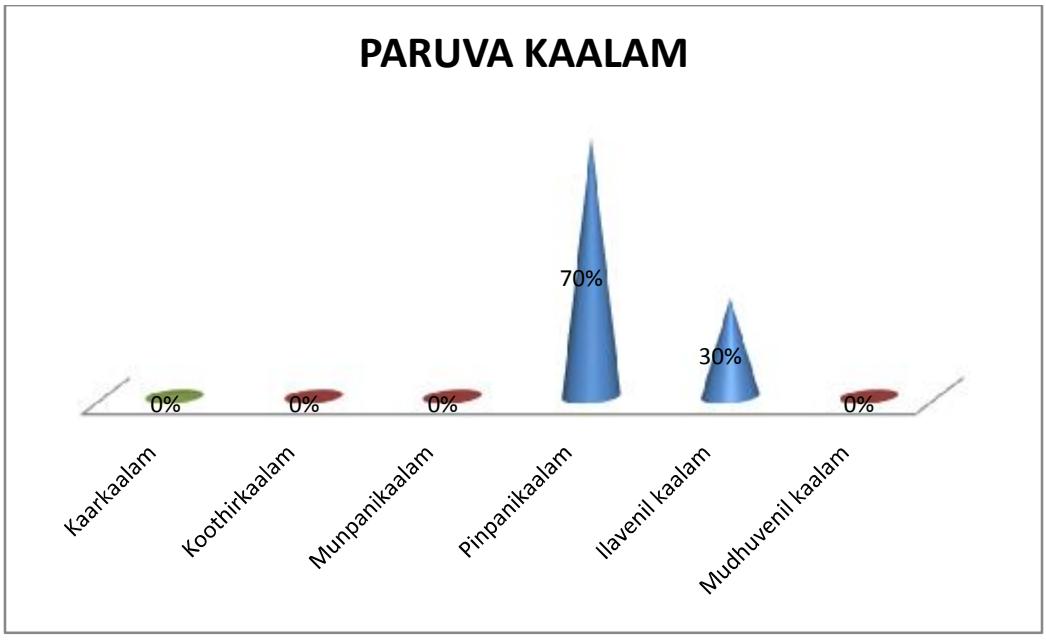
INFERENCE:

All the 40 cases (100%) were found to posses Rasatha gunam.

6. PARUVA KAALAM:

Table 6:

Season	No. of cases	Percentage (%)
Kaarkaalam	0	0%
Koothirkaalam	0	0%
Munpanikaalam	0	0%
Pinpanikaalam	29	71%
Ilavenil kaalam	11	29%
Mudhuvenil kaalam	0	0%



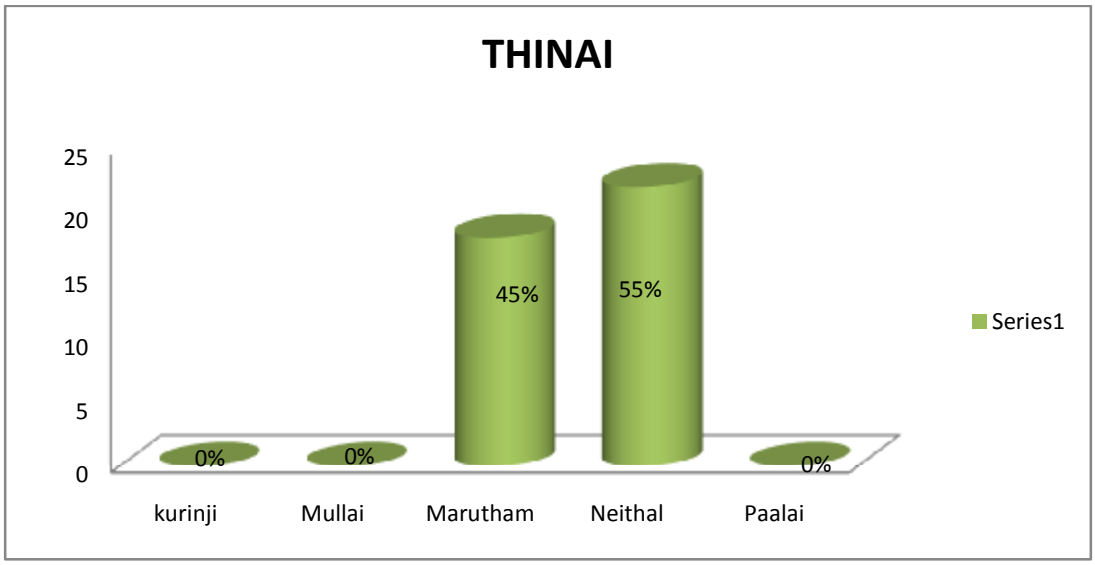
INFERENCE:

Among 40 cases, most of the cases 29 (71%) were seems to be reported in Pinpanikaalam and in Ilavenil kaalam it was 11 (29%).

7.THINAI:

Table 7:

Thinai	No. of patients	Percentage(%)
Kurinji	0	**0%**
Mullai	0	**0%**
Marutham	18	**45%**
Neithal	22	**55%**
Paalai	0	**0%**



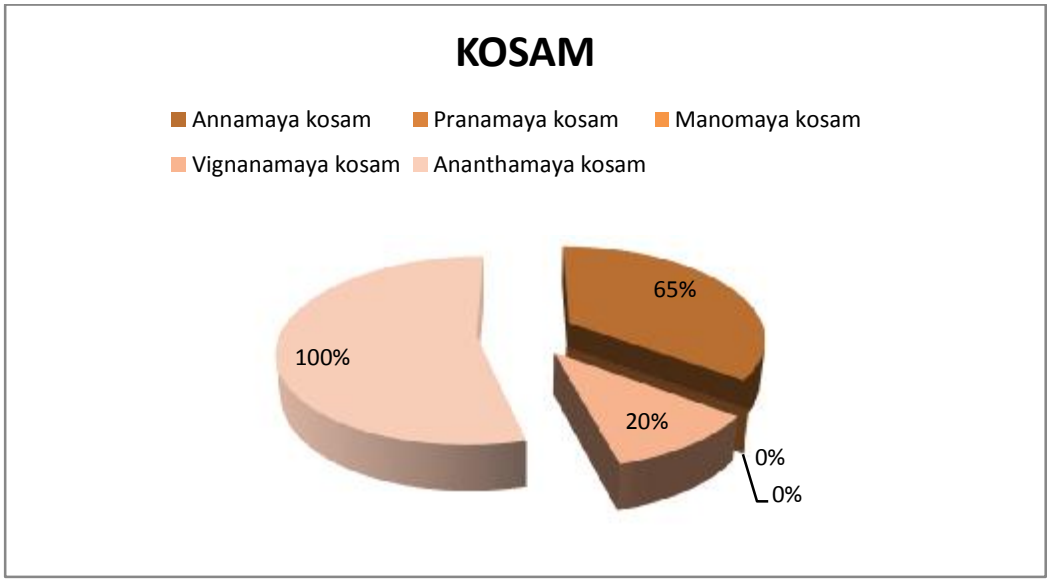
INFERENCE:

45% of cases (18) were from Marutha nilam, 55% of cases (22) were from Neithal nilam.

8. KOSANGAL:

Table8:

Kosam	No. of cases	Percentage (%)
Annamaya kosam	26	65%
Pranamaya kosam	0	0%
Manomaya kosam	0	0%
Vignanamaya kosam	8	20%
Aanandhamaya kosam	40	100%



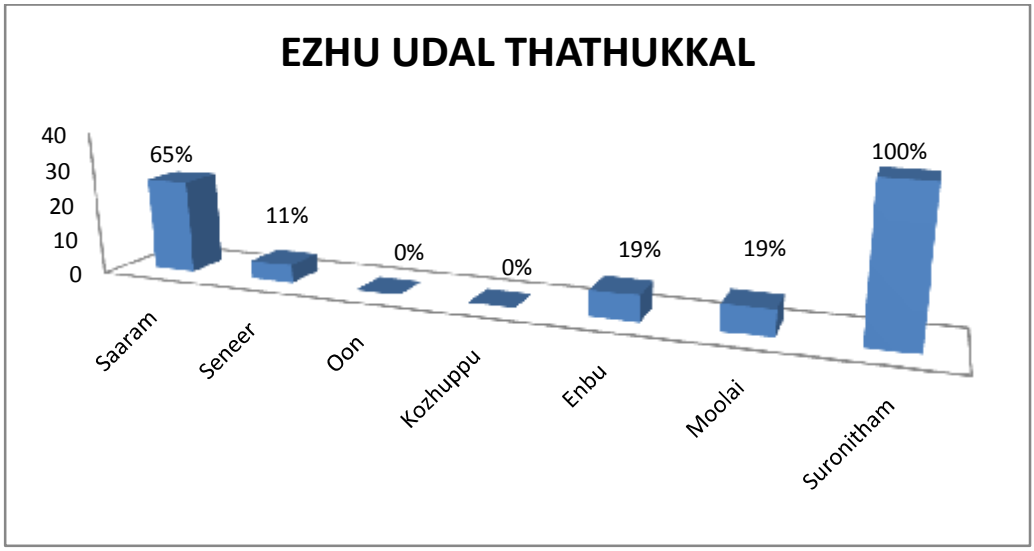
INFERENCE:

Annamayakosam was affected in 65% of cases (26), Vignanamaya kosam was affected in 20% of cases (8), Aanandhamaya kosam was affected in 100% of cases (40).

9. EZHU UDAL THATHUKKAL:

Table 9:

Udal thathukkal	No. of cases	Percentage (%)
Saram	26	65%
Seneer	5	11%
Oon	0	0%
Kozhuppu	0	0%
Enbu	7	19%
Moolai	7	19%
Suronitham	100	100%



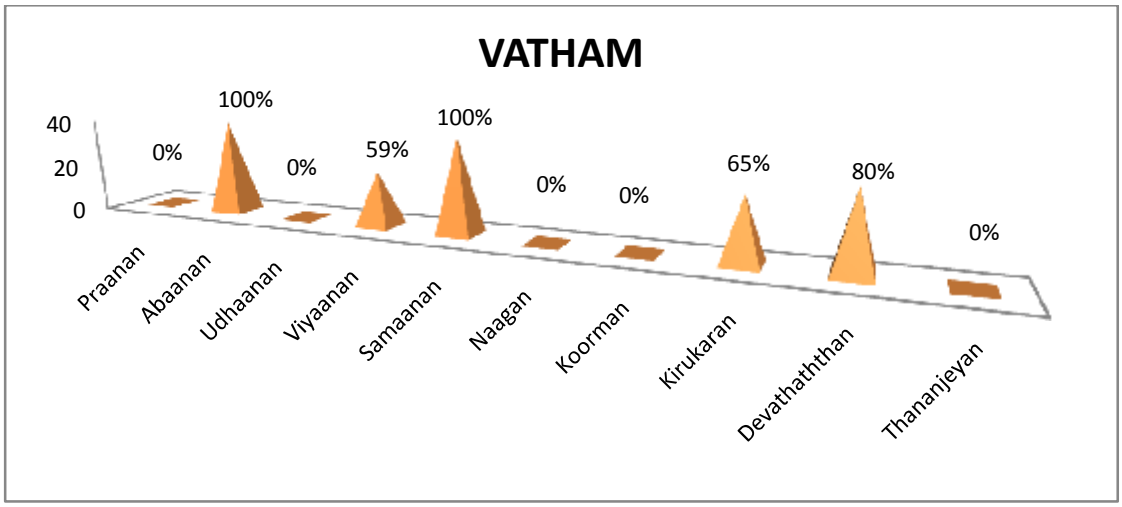
INFERENCE:

In ezhu udal thathukkal Saaram (general tiredness, loss of appetite) was affected in 26 cases (65%), Seneer (low hemoglobin level) was affected in 5 cases (11%) , Enbu and Moolai was affected in 7 cases (19%), Suronitham (vaginal discharge) was affected in all cases (100%).

10. VAATHAM:

Table 10:

Vaatham	No. of cases	Percentage (%)
Praanan	0	0%
Abaanan	40	100%
Udhaanan	0	0%
Viyaanan	23	59%
Samaanan	40	100%
Naagan	0	0%
Koorman	0	0%
Kirukaran	26	65%
Devathaththan	32	80%
Thananjeyan	0	0%



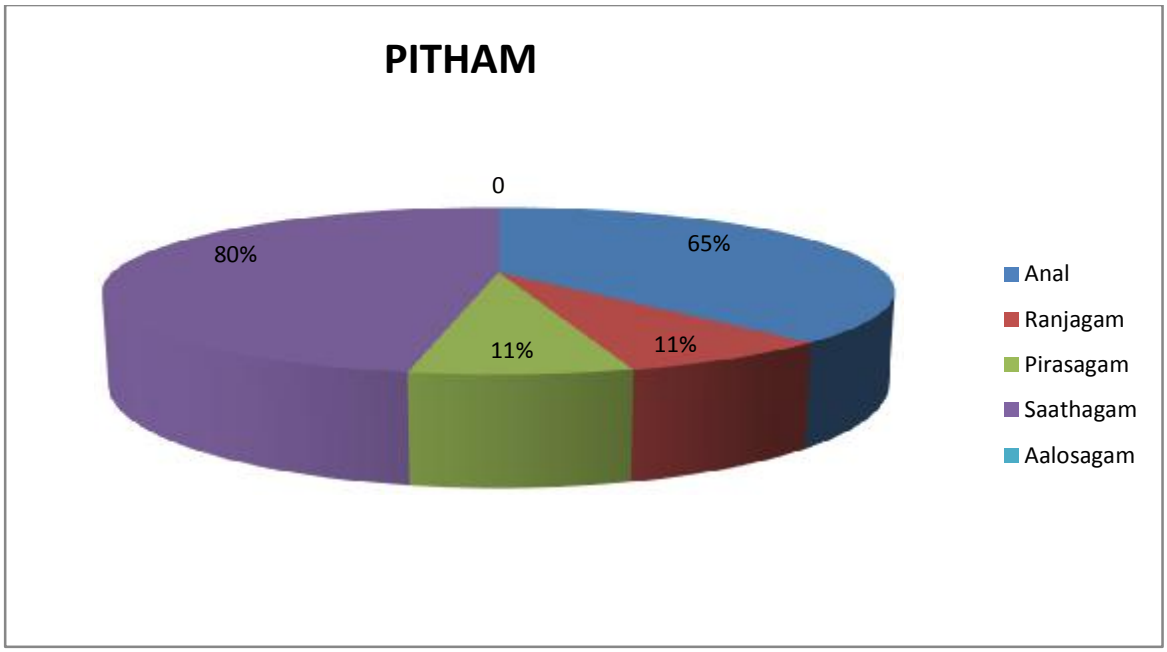
INFERENCE:

Abaanan (vaginal discharge, dysuria, lower abdominal pain) was affected in all cases (100%), Viyaanan (pain in the low back and both the knees) was affected in 23 cases (59%) , Samaanan (vaginal discharge, dysuria, lower abdominal pain, general tiredness) was affected in all cases (100%), Kirukaran (loss of appetite) was affected in 26 cases (65%) , Devathaththan (general tiredness) was affected in 32 of cases (80%).

11.PITHAM:

Table 11:

Pitham	No. of cases	Percentage (%)
Anal	26	65%
Ranjagam	5	11%
Pirasagam	5	11%
Saathagam	32	80%
Aalosagam	0	0%



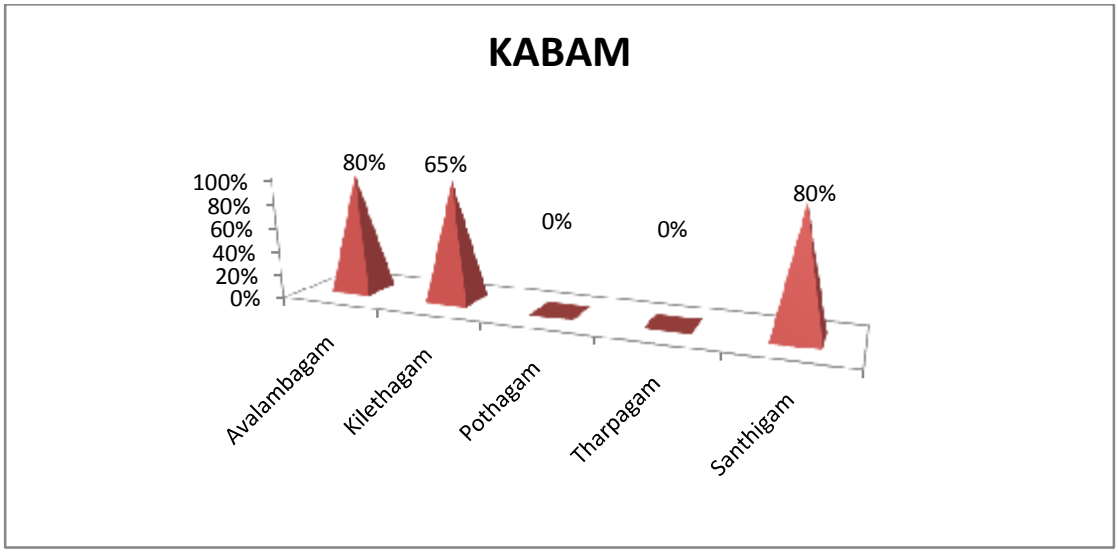
INFERENCE:

Among 40 patients Anal pitham (loss of appetite) was affected in 26 cases (65%), Ranjaga pitham and Prasagam (low hemoglobin level, paleness) was affected in 5 cases(11%) each, Saathagam (low back pain, general tiredness) was affected in 32 cases (80%).

12.KABAM:

Table12:

Kabam	No. of cases	Percentage (%)
Avalambagam	32	80%
Kilethagam	26	65%
Pothagam	0	0%
Tharpagam	0	0%
Santhigam	32	80%



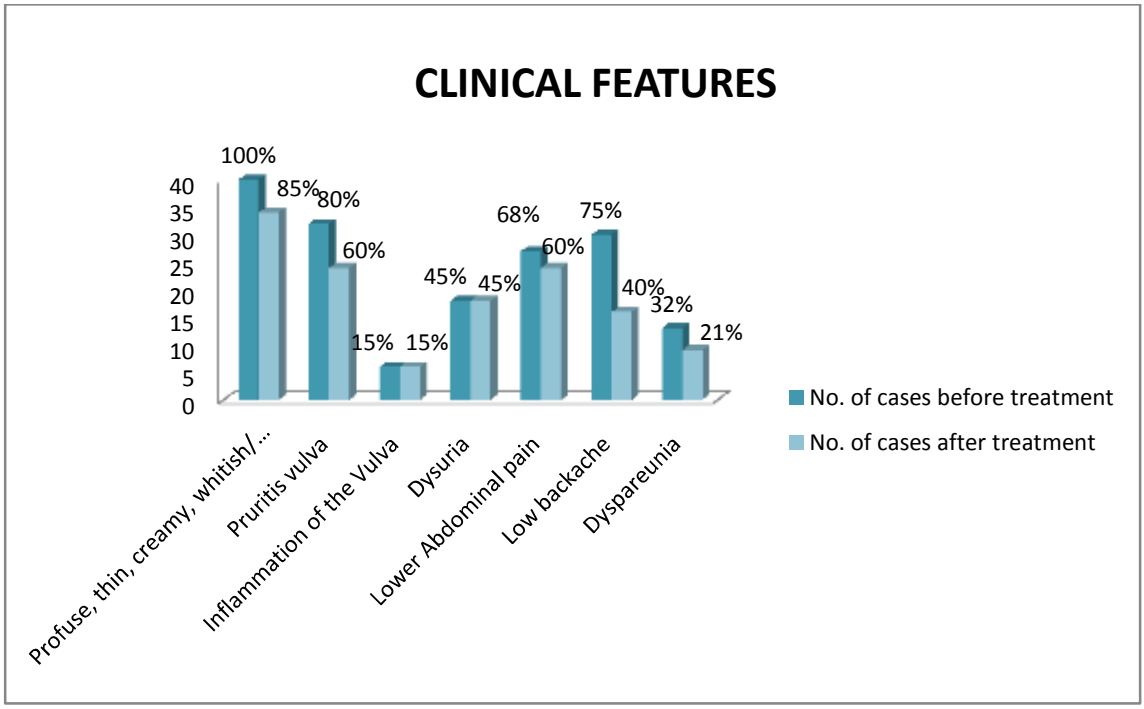
INFERENCE:

Among 40 patients Avalambagam (since the other types of kabam are affected) was affected in 32 cases (80%),Kilethagam (loss of appetite) was affected in 26 cases (65%), Santhigam (low back pain, knee joint pain) was affected in 32 cases (80%).

13. CLINICAL MANIFESTATIONS:

Table 13:

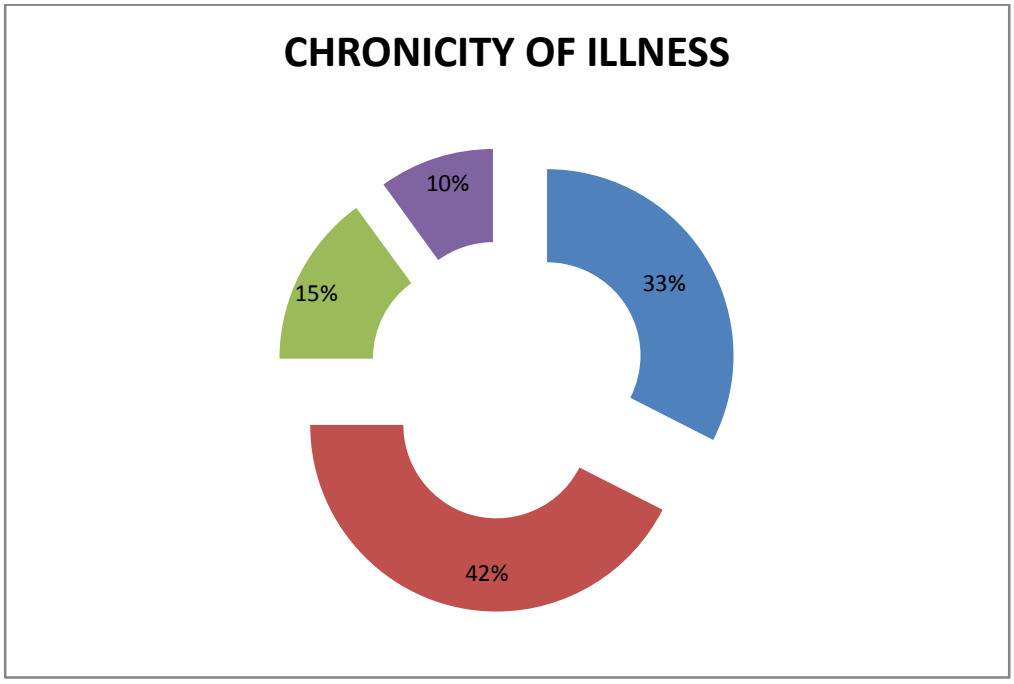
Clinical features	No. of cases		Percentage (%)	
	Before treatment	After treatment (Response)	Before treatment	After treatment (Response)
Profuse, thin, creamy, whitish/slightly greenish frothy discharge or curdy discharge	40	34	100%	85%
Pruritis vulva	32	24	80%	60%
Inflammation of the Vulva	6	6	15%	15%
Dysuria	18	18	45%	45%
Lower Abdominal pain	27	24	68%	60%
Low back ache	30	16	75%	40%
Dyspareunia	13	9	32%	21%



14. CHRONICITY OF ILLNESS :

Table 14:

Duration of illness	No. of cases	Percentage (%)
0-6 months	13	33%
6 months -1year	17	42%
1-3 years	6	15%
3-5 years	4	10%
Total	40	100%



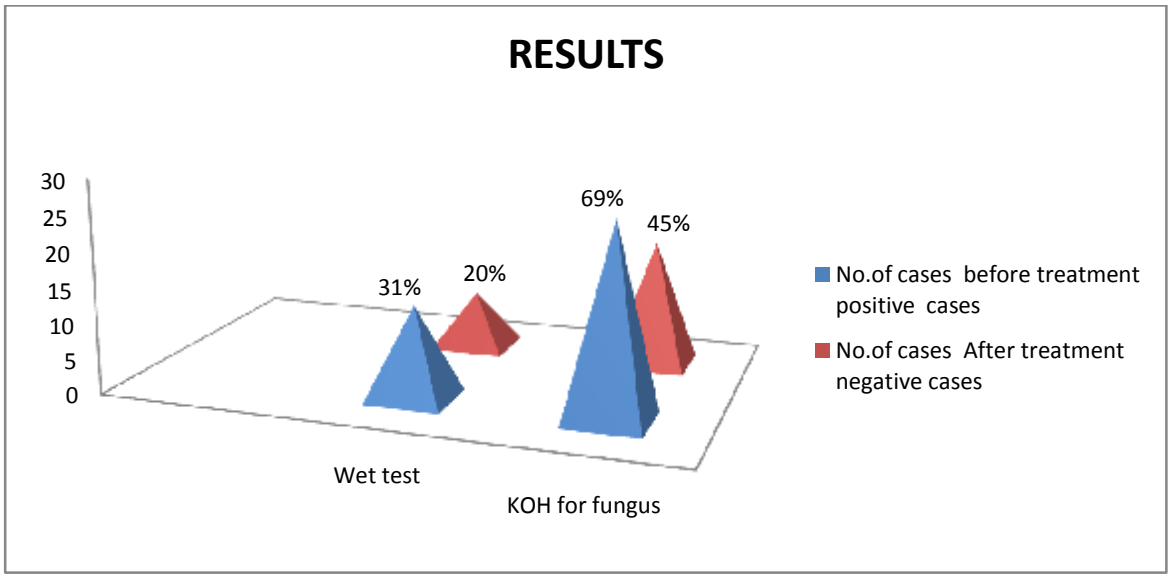
INFERENCE:

Among 40 patients 13cases (33%) suffered from this disease up to 6 months, 17 cases(42%) suffered upto 1 year, 6 cases (15%) suffered up to 3 years, 4 cases (10%) suffered up to 5 years.

15. RESULTS:

Table 15:

RESULTS	No.of cases		Percentage (%)	
	Before treatment Positive cases	After treatment Negative cases	Before treatment Positive cases	After treatment Negative cases
WET TEST(Trichomonas vaginalis)	13	8	31%	20%
KOH for fungus (Candida albicans)	27	18	69%	45%
Total	40	14	100%	32%



INFERENCE:

Among 40 patients ,13 cases (31%) showed positive to wet test (Trichomonas vaginalis) in before treatment and 8 cases(20%) showed negative to wet test (Trichomonas vaginalis) in after treatment, 27 cases (69%) showed positive to KOH for fungus (Candida albicans) in before treatment and 18 cases (45%) showed negative to KOH for fungus (Candida albicans) in after treatment.

OBSERVATION OF CLINICAL LABORATORY INVESTIGATIONS

At the time of admission to the trial, in all the patients the following parameters observed,

I. **Routine blood investigations**,

1.Haemoglobin estimation ,

2.Total WBC count,

3.total RBC count

4.Differential count,

5.Erythrocyte sedimentation Rate,

II**. Blood sugar**

1.Fasting

2.Post prandial

III. Liver function test,

IV. Renal function test,

V. Serum Lipid Profile,

VI. **Urine examination**

1.Albumin

2.Sugar

3.deposit

VIII. **Microbiology**

1.VDRL

2.Wet test

3.KOH for fungus

IX. Neer kuri, Nei kuri also observed.

BHARATH CLINICAL LAB

No. 50A, Main Road, Kovilpathagai, Avadi.
CHENNAI - 600 062.

Pt. Name ..... Mrs . Sivaranjani

Date : 2. 12. 15

Vaginal Smear for

Trichomonas Vaginalis : Positive

Monalisis : Negative

3 to 5 Puscells / Hpf

Pleanty of Epithelial cells / Hpf

Working Hours : 8.00 am. 12.00 am; Evening : 5.00 pm. - 9.00 pm.
Sunday : 8.00 am. - 1.00 pm.

HITECH DIAGNOSTIC CENTRE

Multi Speciality Reference Laboratory

HITECH

Central Lab
1, Millers Road, Kilpauk, Chennai-10.
Tel : 4291 9999

CT Scan, LAB & Molecular Diagnostics
13, Dr. Nair Road, T.Nagar, Chennai-17
Tel : 4293 8200

Web : www.hitechlabsindia.com

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MYLAPORE 4207 4934 | SALIGRAMAM 4554 2183 | ANNA NAGAR 4261 2741 | TAMBARAM 4315 9150 | WASHERMENPET 4204 9452 | MKB NAGAR 2552 0015 | AMBATTUR 4208 6905 | PERAVALLUR 4278 9683 | VILLIVAKKAM 4355 4801 | TRIPLICANE 4351 8585 | ADYAR 4558 7973 | MADIPAKKAM 2247 5871 | TIRUVALLUR 2766 3878

Patient : P0513975 **Mrs. SIVARANJANI.S (23/F)**
SID.No. : **018063**
Branch : **TAMBARAM**
Address :

Ph :7418858072

Date :19/03/2016
Rec Time :11:03:53

Rpt Date :19/03/2016
Rpt Time :17:00:09
Page # :1 / 1
Final report

Referrer : **Dr.ELAVARASI**

Test	Result	Biological Reference Interval

TEST REPORT

MICROBIOLOGY

VAGINAL SMEAR FOR TV & GC	: No TV or GC seen. Many pus cells, Few Gram negative bacilli were seen.	

DR.SP.GANESAN. MBBS.,DCP.,

*** End Of Report ***

" Our Kilpauk Lab Serves You Round The Clock "

Mrs. Malini Parasuraman M.Sc., Chief Biochemist | Dr. Radhi Lawrence AB (Path) Chief Pathologist | Dr. Sp. Ganesan MBBS. DCP Medical Director

ENDOCARE
DIAGNOSTIC CENTRE

BMQR

TEST REPORT

SID No.	: 711699		
Name	: MRS. DEVIKA		
Age / Sex	: 46 Years / Female	Patient ID	: 1086312
Ref. By	: Dr.Vaasumathi.MBBS,DGO.,	Registered Date	: 10 Dec 15/14:45
		Report Date	: 10 Dec 15/17:22

Test	Result	Reference Value
	HISTOPATHOLOGY	
PAP SMEAR	: Smear shows superficial cells and intermediate cells in a background of dense neutrophilic infiltrate. Trichomonas vaginalis organisms are seen. No atypia seen. Inflammatory Smear. Positive for Trichomonas vaginalis. Negative for intraepithelial lesion.	

- End Of Report -

Dr.Geetha Devadas,MD.(Path),DCP
CONSULTANT PATHOLOGIST

Endocare Diagnostic Centre
(Clinical Referral Laboratory)
An ISO 9001-2008 Certified Laboratory
H - 11, 2nd Street, Anna Nagar East, Chennai - 600 102. Tel : 2626 5635 / 36 / 37
E-mail : endocarelab@rocketmail.com Website : www.endocare.co.in

HITECH DIAGNOSTIC CENTRE

Multi Speciality Reference Laboratory

HITECH

Central Lab	CT Scan, LAB & Molecular Diagnostics
1, Millers Road, Kilpauk, Chennai-10. Tel : 4291 9999	13, Dr. Nair Road, T.Nagar, Chennai-17 Tel : 4293 8200

Web : www.hitechlabsindia.com

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MYLAPORE 4207 4934	SALIGRAMAM 4554 2183	ANNA NAGAR 4261 2741	TAMBARAM 4315 9190	WASHERMENPET 4204 9452	MKB NAGAR 2552 0015	AMBATTUR 4208 6905	PERAVALLUR 4278 9603	VILLIVAKKAM 4355 4801	TRIPLICANE 4351 8505	ADYAR 4558 7973	MADIPAKKAM 2247 5071	TIRUVALLUR 2766 3878

Patient : P0517635 **Mrs. DEVIKA.R (46/F)**

SID.No. : **021810**

Branch : **TAMBARAM**

Address :

Ph :9003165353

Date :04/04/2016

Rec Time :12:51:52

Rpt Date :04/04/2016

Rpt Time :17:42:51

Page # :1 / 1

Re-print

Referrer : **Dr.ELAVARASI**

TEST REPORT

Test	Result	Biological Reference Interval
MICROBIOLOGY		
VAGINAL SMEAR FOR TV & GC	: No TV and GC seen. Plenty of pus cells, Gram Negative Bacilli were seen.	

Ganesan

DR.SP.GANESAN. MBBS.,DCP.,

*** End Of Report ***

" Our Kilpauk Lab Serves You Round The Clock "

Mrs. Malini Parasuraman M.Sc., Chief Biochemist	Dr. Radhi Lawrence AB (Path) Chief Pathologist	Dr. Sp. Ganesan MBBS, DCP Medical Director

SATISTICAL ANALYSIS

Statistical Analysis:

All collected data were entered into computer using MS Excel software. The data entry was cross-checked manually with CRF. The data was analysed using STATA software. The probability value 0.05 was taken as significant level. Paired =t' test was employed to determine the significance of clinical symptoms, total cell count, pus cells, epithelial cells before and after treatment.

Mean ±Standard deviation of Clinical symptoms - Before and After treatment

Treatment status	Mean ±Std deviation	Significance
Clinical symptoms- BT	3.225±0.181	t = 15.2656, p <0.0001
Clinical symptoms- AT	1.025±0.149	**Highly significant**

The clinical symptoms before treatment and after treatment were 3.225 and 1.025 respectively and the reduction of clinical symptoms was highly significant. The percentage of reduction of clinical symptoms is 68.22%(1.025÷3.225×100=31.78,100-31.78=68.22%)

Mean ±Standard deviation of Total cell count - Before and After treatment

Treatment status	Mean ±Std deviation	Significance
Total cell count - BT	7564.75±270.140	t = -1.1876, p <0.2422
Total cell count - AT	7830±307.308	Not significant

The Total cell count before treatment and after treatment were 7564.75 and 7830 respectively and it was not highly significant.

BEFORE AND AFTER TREATMENT OF 1-20 PATIENTS BLOOD INVESTIGATION

S.NO	OP NO	AGE/ SEX	BEFORE TREATEMENT																		AFTER TREATEMENT																	
			LIPID PROFILE (mg/dl)					LIVER FUNCTION TEST											RFT (mg/dl)		LIPID PROFILE (mg/dl)					LIVER FUNCTION TEST											RFT (mg/dl)	
			T.CHO	HDL	LDL	VLDL	TGL	T.B mg/dl	D.B (mg/dl)	I.B mg/dl	OT IU/L	PT IU/L	ALK IU/L	T.P gms%	Alb gms%	Gl gms%	Ca mg/dl	Ph mg/dl	U.A mg/dl	Urea	Cr	T.CHO	HDL	LDL	VLDL	TGL	T.B mg/dl	D.B (mg/dl)	I.B mg/dl	OT IU/L	PTIU/ L	ALK IU/L	T.P gms%	Alb gms%	Gl gms%	Ca mg/dl	Ph mg/dl	U.A mg/dl	Urea	Cr
1	H22960	23/F	176	45	100	15	76	0.3	0.1	0.2	19	9	67	8.2	4.9	3.3	8.6	4.2	3.3	15	0.9	165	47	105	15	87	0.3	0.1	0.2	24	17	56	7.4	4.4	3	9.5	3.6	3.5	14	0.9
2	H28142	45/F	167	70	90	18	92	0.5	0.2	0.3	16	11	88	8.2	4.5	3.7	8.1	6.1	3.6	18	1	178	59	97	14	70	0.5	0.2	0.3	15	11	85	8.3	4.5	3.8	8.8	2.2	3.2	18	0.9
3	H25871	35/F	222	47	128	26	132	1.1	0.4	0.7	183	192	51	8.1	4.1	4	8.1	6.3	3.1	17	1	213	55	136	18	90	1.2	0.3	0.9	30	19	41	7.9	4.3	3.6	7.9	3.6	3.3	22	1
4	H28208	29/F	166	68	91	41	203	0.6	0.3	0.3	22	20	98	8.2	4.6	3.6	8.4	7.9	3.8	13	0.9	176	61	93	42	180	0.8	0.4	0.4	45	34	87	8.1	4.1	4	8.1	6.1	3	20	0.9
5	H29028	29/F	196	66	110	13	64	0.4	0.2	0.2	15	5	51	7.4	4.5	2.9	8	6.2	2	19	0.8	176	45	100	15	76	0.3	0.1	0.2	19	9	67	8.2	4.9	3.3	8.6	4.2	3.3	15	0.9
6	H27729	38/F	153	72	77	15	75	0.4	0.2	0.2	20	14	70	6.9	4.4	2.5	8.1	3.9	3.7	21	1	147	70	79	25	89	0.9	0.5	0.4	46	43	90	8.1	4.1	4	8.1	6.3	3.1	17	1
7	H33752	26/F	126	64	132	10	52	0.7	0.3	0.4	34	16	71	8.4	4.6	3.8	9.5	4.2	3.6	12	0.9	120	54	87	11	53	0.5	0.2	0.3	25	8	52	7.8	4.5	3.3	8.1	3.6	3	13	0.9
8	H52862	37/F	190	53	109	20	99	0.7	0.3	0.4	20	17	58	7.9	4.7	3.1	8.2	7	4.8	29	0.9	166	68	91	41	89	0.6	0.3	0.3	22	20	98	8.2	4.6	3.6	8.4	7.9	3.8	13	0.9
9	H35141	26/F	153	63	120	6	29	0.6	0.3	0.3	16	10	39	7.5	4.5	3	8.8	4.1	2.1	14	0.9	154	61	83	19	97	0.3	0.2	0.1	22	23	58	8.2	4.9	3.3	8.6	4.2	3.3	21	0.9
10	H57358	33/F	168	78	88	19	94	0.4	0.1	0.3	21	12	63	7.4	46	2.8	7.4	5.6	2.5	15	0.7	167	70	90	18	92	0.5	0.2	0.3	16	11	88	8.2	4.5	3.7	8.1	6.1	3.6	18	1
11	H32430	21/F	136	52	98	16	88	0.5	0.2	0.3	14	9	50	7.1	4.3	2.8	9.2	4.6	3.9	19	0.7	126	64	132	10	52	0.7	0.3	0.4	34	16	71	8.4	4.6	3.8	9.5	4.2	3.6	12	0.9
12	H46840	31/F	114	34	118	34	170	0.4	0.2	0.2	21	14	4.9	7.2	4.2	3	7.6	4.2	3.9	20	0.8	153	63	120	6	29	0.6	0.3	0.3	16	10	39	7.5	4.5	3	8.8	4.1	2.1	14	0.9
13	H47479	35/F	156	65	89	15	74	0.3	0.1	0.1	17	10	45	7	4.3	2.7	8.1	1.9	2.9	15	0.8	169	54	78	16	79	0.2	0.1	0.1	24	14	48	6.8	4.3	2.5	7.5	5.9	2.2	15	0.8
14	H39658	39/F	132	56	79	8	40	1	0.4	0.6	13	6	59	7.5	4.2	3.3	9	3.2	3.1	20	0.8	159	44	94	27	135	0.8	0.3	0.5	14	5	71	7.1	4.3	2.8	6.8	5.6	6.5	22	0.9
15	H36165	30/F	205	68	117	18	89	0.7	0.3	0.4	23	19	72	7.4	4.7	2.7	8.4	3	2.9	17	0.7	190	53	108	15	73	0.5	0.2	0.3	19	13	61	7.4	4.6	2.8	8.6	4.4	2.7	20	0.7
16	H40688	37/F	166	69	94	22	109	0.4	0.2	0.2	14	11	63	7.5	4.4	3.1	8.8	4	2.5	17	0.8	147	70	79	25	89	0.9	0.5	0.4	46	43	90	8.1	4.1	4	8.1	6.3	3.1	17	1
17	H40766	24/F	172	64	101	15	74	1	0.4	0.6	17	13	47	7.6	4.6	3	9	3.9	2.9	27	0.8	153	72	77	15	75	0.4	0.2	0.2	20	14	70	6.9	4.4	2.5	8.1	3.9	3.7	21	1
18	H34331	42/F	150	47	78	11	53	0.4	0.2	0.2	15	12	92	7.6	4.6	3	8.3	3.8	3	18	0.7	169	44	104	27	135	0.4	0.2	0.2	26	20	92	7.6	4.5	3	8.6	4.5	3.4	21	0.8
19	H37543	25/F	143	74	80	13	67	0.4	0.2	0.2	19	11	88	7.7	4.4	3.3	8.4	3.5	2.4	27	0.8	129	64	66	9	46	0.4	0.2	0.2	46	22	69	7.8	4.4	3.4	8.1	4.1	1.9	36	0.7
20	H50741	27/F	152	38	92	19	95	0.6	0.2	0.4	24	26	84	8	4.5	3.5	9.2	5.8	4.2	21	0.8	172	40	103	34	171	0.6	0.1	0.5	23	20	97	8.2	4.3	3.9	8.5	4	3.3	25	0.7

BEFORE AND AFTER TREATMENTOF 1-20 PATIENTS URINE ANALYSIS

BEFORE TREATMENT												AFTER TREATMENT									
S.NO	OP. No	Age/ sex	Alb	Sugar		Deposit		Neerkuri	Neikuri	BS	BP	Uro.Bili	Alb	Sugar		Deposit		Neerkuri	Neikuri	BS	BP	Uro.Bili
				FA	PP	Puscells	Epi cells							FA	PP	Puscells	Epi cells					
1	H22960	23/F	Nil	Nil	Nil	1-3	1-3	Pale yellow, clear	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	1-2	Pale yellow, clear	Pearl shape	Nil	Nil	Normal
2	H28142	45/F	Nil	Nil	Nil	10-12	12-16	Pale yellow, cloudy	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	1-2	Pale yellow, clear	Pearl shape	Nil	Nil	Normal
3	H25871	35/F	Nil	Nil	Nil	2-4	2-4	Colourless, clear	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	1-2	Pale yellow	Round shape	Nil	Nil	Normal
4	H28208	29/F	Nil	Nil	Nil	2-4	3-5	Yellow colour	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	1-2	Pale yellow	Pearl shape	Nil	Nil	Normal
5	H29028	29/F	Nil	Nil	Nil	2-4	2-4	Colourless, notclear, cloudy appearance	Irregular shape, moderaters spread	Nil	Nil	Normal	Nil	Nil	Nil	2-3	1-2	Colourless, clear	Semi circle, slowly spread	Nil	Nil	Normal
6	H27729	38/F	Nil	Nil	Nil	1-2	4-5	Colourless, clear	Semi circle, slowly spread	Nil	Nil	Normal	Nil	Nil	Nil	6-7	1-2	Colourless, clear	Pearl shape	Nil	Nil	Normal
7	H33752	26/F	Nil	Nil	Nil	1-2	1-2	Pale yellow	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	2-4	Pale yellow deposit	Round shape	Nil	Nil	Normal
8	H52862	37/F	Nil	Nil	Nil	2-4	1-2	Pale yellow, clear	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	1-2	Pale yellow, clear	Pearl shape	Nil	Nil	Normal
9	H35141	26/F	Nil	Nil	Nil	2-4	2-4	Yellow colour	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	2-4	Pale yellow	Sieve pattern	Nil	Nil	Normal
10	H57358	33/F	Nil	Nil	Nil	3-5	2-4	Colourless, clear	Bean shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	2-3	Pale yellow	Round shape	Nil	Nil	Normal
11	H32430	21/F	Nil	Nil	Nil	3-5	4-6	Lemon yellow	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	1-2	Yellow colour	Pearl shape	Nil	Nil	Normal
12	H46840	31/F	Nil	Nil	Nil	2-3	2-3	Pale yellow	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	2-3	Colourless, clear	Round shape	Nil	Nil	Normal
13	H47479	35/F	Nil	Nil	Nil	2-4	2-4	Pale yellow	Sieve pattern	Nil	Nil	Normal	Nil	Nil	Nil	3-5	2-4	Pale yellow	Pearl shape	Nil	Nil	Normal
14	H39658	39/F	Nil	Nil	Nil	Plenty	3-5	Pale yellow	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	Loaded	3-5	Yellow ,No foam	Circle shape	Nil	Nil	Normal
15	H36165	30/F	Nil	Nil	Nil	2-3	2-4	Pale amber	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	2-4	Pale yellow ,clear	slowly spread	Nil	Nil	Normal
16	H40688	37/F	Nil	Nil	Nil	3-5	2-4	Yellow colour	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	1-2	Pale yellow	Round shape	Nil	Nil	Normal
17	H40766	24/F	Nil	Nil	Nil	2-4	2-4	Pale yellow	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	2-3	1-2	Pale yellow	Circle shape	Nil	Nil	Normal
18	H34331	42/F	Nil	Nil	Nil	2-3	2-4	Pale yellow	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	4-6	Plenty	Pale yellow, clear	Round shape	Nil	Nil	Normal
19	H37543	25/F	Nil	Nil	Nil	2-3	2-4	Pale yellow	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	2-4	Yellow colour	Round shape	Nil	Nil	Normal
20	H50741	27/F	Nil	Nil	Nil	2-4	2-4	Pale yellow, clear	Sieve pattern	Nil	Nil	Normal	Nil	Nil	Nil	2-4	2-4	Pale yellow, clear	Round shape	Nil	Nil	Normal

BEFORE AND AFTER TREATMENTOF 1-20 PATIENTS BLOOD INVESTIGATION

S.NO	OP NO	AGE/ SEX	BEFORE TREATMENT											AFTER TREATMENT											
			TC Cells/cu mm	DC			ESR 1/2/1hr	Hb gm/dl	T.RBC	Blood sugar mg/dl			Microbiology		TC Cells/cu mm	DC			ESR 1/2/1hr	Hb gm/dl	T.RBC	Blood sugar mg/dl		Microbiology		
				P%	L%	md %				FA	PP	VDRL	wet test	KOH for fungus		P%	L%	md %				FA	PP	VDRL	wet test	KOH for fungus
1	H22960	23/F	10,200	52	43	5	6/12mm	13	4.4	93	101	Non-reactive	Positive	Neg	7,700	54	40	6	4/10mm	12.1	4.2	101	125	Non-reactive	Neg	Neg
2	H28142	45/F	7,800	74	22	4	20/44mm	12.7	4.8	110	150	Non-reactive	Positive	Neg	7,500	73	23	4	32/66mm	12.9	4.9	89	104	Non-reactive	Neg	Neg
3	H25871	35/F	8,500	55	43	2	10/20m	12.8	4.7	73	132	Non-reactive	Neg	Positive	8,700	50	48	2	10/20mm	13.2	4.7	87	132	Non-reactive	Neg	Positive
4	H28208	29/F	8300	52	40	8	10/26mm	11.6	4.2	89	165	Non-reactive	Neg	Positive	9,200	58	35	7	5/7mm	12	4.1	97	134	Non-reactive	Neg	Neg
5	H29028	29/F	9100	52	47	1	6/12mm	12.8	4.4	88	92	Non-reactive	Neg	Positive	9,800	50	46	4	8/15mm	11.6	4.2	83	112	Non-reactive	Neg	Neg
6	H27729	38/F	5800	55	40	5	8/16mm	12	4.2	99	123	Non-reactive	Neg	Positive	5,900	50	45	5	12/28mm	11.5	4.1	71	129	Non-reactive	Neg	Positive
7	H33752	26/F	5,400	54	40	6	2/4mm	13.6	4.6	101	134	Non-reactive	Neg	Positive	6,200	51	43	6	2/4mm	12.7	4.3	82	128	Non-reactive	Neg	Neg
8	H52862	37/F	9000	60	35	5	16/32mm	12.1	4.4	98	142	Non-reactive	Positive	Neg	9,800	62	35	3	8/10mm	12	4.2	85	123	Non-reactive	Positive	Neg
9	H35141	26/F	5,300	44	52	4	6/12mm	11.2	4.6	84	130	Non-reactive	Neg	Positive	8,000	65	30	5	20/46mm	10.7	4.4	88	90	Non-reactive	Neg	Neg
10	H57358	33/F	6300	55	37	8	4/16mm	12.5	4.2	86	88	Non-reactive	Neg	Positive	7,600	58	37	5	5/10mm	12.9	4.8	98	112	Non-reactive	Neg	Neg
11	H32430	21/F	7,700	60	35	5	2/4mm	13	4.2	89	123	Non-reactive	Neg	Positive	8,000	62	33	5	2/4mm	13.2	4.6	97	135	Non-reactive	Neg	Positive
12	H46840	31/F	5,900	69	25	6	8/16mm	13.5	5	88	121	Non-reactive	Neg	Positive	6,200	65	32	3	6/9mm	13	4.2	87	143	Non-reactive	Neg	Neg
13	H47479	35/F	4,800	57	38	5	12/26mm	11.1	3.8	78	133	Non-reactive	Neg	Positive	4,800	58	35	7	10/22mm	11.6	3.9	95	115	Non-reactive	Neg	Neg
14	H39658	39/F	8,100	64	32	4	8/16mm	9.8	4.3	97	127	Non-reactive	Neg	Positive	6,000	58	37	5	22/46mm	9.9	4.5	98	130	Non-reactive	Neg	Positive
15	H36165	30/F	8,600	80	15	5	6/12mm	11.8	4.8	107	111	Non-reactive	Neg	Positive	5,500	58	37	5	12/26mm	11.4	4.6	93	93	Non-reactive	Neg	Neg
16	H40688	37/F	9,200	67	27	6	2/6mm	11.9	6.1	107	121	Non-reactive	Positive	Neg	9,800	62	33	4	5/7mm	11.5	4	98	132	Non-reactive	Positive	Neg
17	H40766	24/F	9,800	58	34	8	10/22mm	12	4	109	121	Non-reactive	Neg	Positive	9,700	59	32	9	7/9mm	12.5	4.2	89	131	Non-reactive	Neg	Neg
18	H34331	42/F	10,200	58	36	6	4/10mm	12.2	4.1	94	123	Non-reactive	Positive	Neg	10,300	60	36	4	4/10mm	12.2	4.1	105	125	Non-reactive	Neg	Neg
19	H37543	25/F	6,300	53	43	5	30/62mm	11.3	4.3	104	124	Non-reactive	Neg	Positive	5,200	50	44	6	30/62mm	10.8	4.2	90	103	Non-reactive	Neg	Neg
20	H50741	27/F	9,600	60	35	5	10/22mm	12.8	4.4	77	92	Non-reactive	Positive	Neg	10,300	65	30	5	30/62mm	13	4.5	79	87	Non-reactive	Neg	Neg

BEFORE AND AFTER TREATMENT OF 21-40 PATIENTS BLOOD INVESTIGATION

S.NO	OP NO	AGE / SEX	BEFORE TREATEMENT																			AFTER TREATEMENT																	
			LIPID PROFILE (mg/dl)					LIVER FUNCTION TEST												RFT (mg/dl)		LIPID PROFILE (mg/dl)					LIVER FUNCTION TEST												RFT (mg/dl)	
			T.CHO	HDL	LDL	VLDL	TGL	T.B mg/dl	D.B (mg/dl)	I.B mg/dl	OT IU/L	PTIU/L	ALK IU/L	T.P gms %	Alb gms %	Gl gms %	Ca mg/dl	Ph mg/dl	U.A mg/dl	Urea	Cr	T.CHO	HDL	LDL	VLDL	TGL	T.B mg/dl	D.B (mg/dl)	I.B mg/dl	OT IU/L	PTIU/L	ALK IU/L	T.P gms %	Alb gms %	Gl gms %	Ca mg/dl	Ph mg/dl	U.A mg/dl	Urea	Cr
21	H49447	29/F	167	55	106	21	108	0.8	0.3	0.5	16	11	44	7	4.2	2.7	8	3.3	2.7	12	0.7	198	61	115	28	141	0.9	0.4	0.5	18	13	53	7.5	4.1	3.4	8.7	4.6	3.5	18	0.7
22	H40802	40/F	171	62	101	33	166	0.4	0.2	0.2	17	15	39	7.6	4.1	3.5	8.4	3.6	3.4	19	0.7	174	59	97	14	70	0.5	0.2	0.3	15	11	85	8.3	4.5	3.8	8.8	2.2	3.2	18	0.9
23	H45393	38/F	173	45	132	26	132	0.5	0.2	0.3	18	9	45	7.7	4.7	3	8.9	3.1	3.1	21	0.9	155	55	124	18	90	1.2	0.3	0.9	30	19	41	7.9	4.3	3.6	7.9	3.6	3.3	22	1
24	H39565	21/f	134	44	84	11	57	0.3	0.1	0.2	27	26	71	7.9	4.6	3.3	9.2	2.3	4.6	15	0.8	165	40	97	33	167	0.4	0.2	0.2	25	17	80	7.2	4.4	2.8	8.5	5.4	4	16	0.8
25	H32020	25/F	150	64	79	8	42	0.4	0.2	0.2	14	5	52	7.3	4.6	2.8	8.3	3.1	2.2	23	0.7	168	63	91	11	54	0.5	0.2	0.3	15	10	41	7.8	4.8	2.9	9.5	7.7	3.4	31	0.8
26	H52309	40/F	175	44	102	42	211	0.4	0.2	0.2	24	24	59	7.9	4.5	3.3	8.3	3.4	3.9	13	0.8	147	70	79	25	89	0.9	0.5	0.4	46	43	90	8.1	4.1	4	8.1	6.3	3.1	17	1
27	H39708	28/F	126	64	132	10	52	0.7	0.3	0.4	34	16	71	8.4	4.6	3.8	9.5	4.2	3.6	12	0.9	159	53	95	15	75	0.4	0.2	0.2	17	17	51	8	4.6	3.4	8.6	3.9	3.6	21	0.9
28	H29167	28/F	161	76	85	8	40	0.5	0.2	0.3	22	8	70	8	4.5	3.5	7.9	6.4	3.5	19	0.8	134	57	67	11	55	0.5	0.3	0.2	18	7	55	7.6	4.4	3.2	8.5	6.7	3.8	20	0.8
29	H29128	34/F	181	49	107	27	133	0.4	0.1	0.3	13	9	54	7.9	4.5	3.4	8.3	7	5.4	24	1	180	44	106	43	217	0.3	0.2	0.1	15	15	59	7	4.3	2.7	8.4	3.7	6	21	1
30	H40791	34/F	122	55	68	8	39	0.8	0.4	0.4	16	13	49	7.4	4.4	3.6	8.4	2.9	2.8	29	0.9	134	56	78	18	92	0.5	0.2	0.3	16	11	88	8.2	4.5	3.7	8.1	6.1	3.6	18	1
31	H33952	30/F	121	68	98	9	43	0.6	0.3	0.3	15	11	44	7.5	4.4	3.1	9.1	4.3	2.5	20	0.8	110	59	132	8	39	0.8	0.4	0.4	15	10	32	7.4	4.5	2.9	7.7	3.3	2.7	22	0.9
32	H28661	45/F	190	75	105	16	78	0.6	0.3	0.3	17	12	55	7.5	4.4	3.1	8.2	2.7	3.1	16	0.9	201	66	120	11	57	0.7	0.3	0.4	19	14	49	7.6	4.6	3	8.9	2.5	3.7	15	0.9
33	H28607	32/F	156	55	87	10	50	0.9	0.4	0.5	18	19	53	8	4.7	3.3	9	6.9	3.8	16	0.9	151	44	78	12	59	0.9	0.3	0.6	17	18	60	7.7	4.5	3.1	8.7	2.1	3.5	18	0.9
34	H25312	36/F	168	73	86	11	54	1.3	0.6	0.7	15	16	51	8.3	4.8	3.5	8.8	2.2	2.9	14	0.8	159	67	91	20	98	0.9	0.4	0.5	15	22	48	7.5	4.5	3	8.3	2.7	2.8	11	0.8
35	H47489	41/F	211	68	117	23	116	1.1	0.4	0.7	20	11	50	7.5	4.4	3.1	8.7	2.6	2.7	16	0.8	190	53	108	15	73	0.5	0.2	0.3	19	13	61	7.4	4.6	2.8	8.6	4.4	2.7	20	0.7
36	H25330	32/F	173	50	96	21	105	0.4	0.2	0.2	13	22	63	7.8	4.8	3	9.2	5.8	4.2	18	0.8	147	70	79	25	89	0.9	0.5	0.4	46	43	90	8.1	4.1	4	8.1	6.3	3.1	17	1
37	H29971	30/F	177	59	98	15	77	0.7	0.3	0.5	14	11	46	7.1	4.4	2.7	7.7	7.9	3.7	20	0.7	175	52	77	18	92	0.7	0.3	0.4	18	12	39	7.2	4.4	2.8	8.2	1.7	2.9	20	0.7
38	H24157	20/F	136	47	78	11	53	0.2	0.1	0.1	16	9	43	6.9	4.5	2.4	8.1	3.2	3	21	0.8	143	44	104	27	135	0.4	0.2	0.2	26	20	92	7.6	4.5	3	8.6	4.5	3.4	21	0.8
39	H67913	44/F	204	74	80	18	90	0.4	0.2	0.2	22	17	79	7.3	4.2	3.1	8.7	3.5	3.83	0.9	0.8	129	64	66	9	46	0.4	0.2	0.2	46	22	69	7.8	4.4	3.4	8.1	4.1	1.9	36	0.7
40	H37527	31/F	143	38	78	19	98	0.5	0.2	0.3	24	26	84	8	4.5	3.5	9.2	5.8	4.2	21	0.8	139	40	67	34	s	0.6	0.1	0.5	23	20	97	8.2	4.3	3.9	8.5	4	3.3	25	0.7

BEFORE AND AFTER TREATMENT OF 21-40 PATIENTS BLOOD INVESTIGATION

S.NO	OP NO	AGE/ SEX	BEFORE TREATMENT												AFTER TREATMENT											
			TC Cells/cu mm	DC			ESR 1/2/1hr	Hb gm/dl	T.RBC	Blood sugar mg/dl		VDRL	MICROBIOLOGY		TC Cells/cu mm	DC			ESR 1/2/1hr	Hb gm/dl	T.RBC	Blood sugar mg/dl		VDRL	MICROBIOLOGY	
				P%	L%	md %				FA	PP		wet test	KOH for fungus		P%	L%	md %				FA	PP		wet test	KOH for fungus
21	H49447	29/F	9,200	56	38	6	6/12mm	13.9	4.5	83	116	Non-reactive	Neg	Positive	11,400	73	25	2	4/12mm	13.5	4.5	86	125	Non-reactive	Neg	Neg
22	H40802	40/F	8,900	59	34	7	4/10mm	11	4.5	105	169	Non-reactive	Positive	Neg	9,000	55	43	2	8/10mm	12	4.6	89	154	Non-reactive	Positive	Neg
23	H45393	38/F	5,400	50	45	5	6/12mm	12.1	4.1	93	132	Non-reactive	Neg	Positive	8,700	50	48	2	10/20mm	12.5	4.7	87	132	Non-reactive	Neg	Positive
24	H39565	21/f	5,990	55	43	2	10/22mm	13.5	4.7	91	93	Non-reactive	Neg	Positive	9,500	67	28	5	16/39mm	12.3	4.3	77	118	Non-reactive	Neg	Neg
25	H32020	25/F	6100	69	25	6	12/24mm	11.6	4	84	120	Non-reactive	Positive	Neg	4,800	60	33	7	14/30mm	11.7	4.1	90	112	Non-reactive	Neg	Neg
26	H52309	40/F	10200	60	35	5	10/22mm	11	4	101	123	Non-reactive	Positive	Neg	10,900	50	45	5	6/8mm	11.5	4.1	71	129	Non-reactive	Neg	Neg
27	H39708	28/F	8,700	63	33	4	26/54mm	12	4.7	104	112	Non-reactive	Neg	Positive	9,200	51	42	7	10/14mm	12.7	4.3	98	128	Non-reactive	Neg	Positive
28	H29167	28/F	7000	69	22	9	6/12mm	11.7	4.4	82	125	Non-reactive	Neg	Positive	5,800	61	30	9	4/8mm	11.3	4.3	86	115	Non-reactive	Neg	Neg
29	H29128	34/F	8,400	58	38	4	10/22mm	12.4	4.6	88	130	Non-reactive	Positive	Neg	7,500	55	40	5	14/30	12	4.5	74	123	Non-reactive	Neg	Neg
30	H40791	34/F	8600	61	35	4	2/4mm	12.8	4.5	102	143	Non-reactive	Neg	Positive	9,300	58	37	5	5/10mm	12.9	4.8	98	112	Non-reactive	Neg	Neg
31	H33952	30/F	5,700	50	43	7	20/44mm	10.4	4.3	88	103	Non-reactive	Neg	Positive	5,200	49	44	7	4/12mm	10	4.2	88	91	Non-reactive	Neg	Neg
32	H28661	45/F	5,000	66	27	7	2/4mm	12	4.1	97	112	Non-reactive	Positive	Neg	4,400	62	32	6	8/16mm	12	4.2	77	95	Non-reactive	Neg	Neg
33	H28607	32/F	9,000	64	31	5	4/12mm	13.4	4.6	105	110	Non-reactive	Neg	Positive	7,300	64	30	6	8/20mm	13	4.5	86	98	Non-reactive	Neg	Positive
34	H25312	36/F	7,300	59	37	4	6/12mm	13.3	4.6	113	131	Non-reactive	Neg	Positive	6,700	61	33	6	10/20mm	13.4	4.6	112	123	Non-reactive	Neg	Neg
35	H47489	41/F	7,300	61	33	6	10/22mm	10.8	4.4	69	102	Non-reactive	Positive	Neg	8,500	58	37	5	5/7mm	10.5	4.3	93	105	Non-reactive	Positive	Neg
36	H25330	32/F	8,600	65	31	4	14/28	11.7	4.1	95	113	Non-reactive	Neg	Positive	9,800	62	33	4	5/7mm	11.5	4	85	124	Non-reactive	Neg	Positive
37	H29971	30/F	4,900	52	44	4	12/26mm	11.3	4.3	104	124	Non-reactive	Neg	Positive	4,600	46	50	4	40/86	11.3	4.4	86	131	Non-reactive	Neg	Neg
38	H24157	20/F	4,700	62	34	4	18/38mm	9.8	3.7	90	115	Non-reactive	Positive	Neg	6,800	60	36	4	10/12mm	10	4	88	125	Non-reactive	Positive	Neg
39	H67913	44/F	8,700	72	26	2	10/22mm	11.3	4.3	81	110	Non-reactive	Neg	Positive	9,400	50	44	6	4/6mm	10.8	4.2	90	103	Non-reactive	Neg	Positive
40	H37527	31/F	7,000	60	35	5	5/8mm	12.8	4.4	77	92	Non-reactive	Neg	Positive	8,200	65	30	5	3/9mm	11.5	4.2	89	132	Non-reactive	Neg	Neg

BEFORE AND AFTER TREATMENT OF 21-40 PATIENTS URINE ANALYSIS

BEFORE TREATMENT													AFTER TREATMENT										
S. NO	OP. No	Age/ sex	Alb	Sugar		Deposit		Neerkuri	Neikuri	BS	BP	Uro.Bili	Alb	Sugar		Deposit		Neerkuri	Neikuri	BS	BP	Uro.Bili
				FA	PP	Pus cells	Epi cells							FA	PP	Pus cells	Epi cells					
21	H49447	29/F	Nil	Nil	Nil	4-5	2-3	Colourless, clear	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	3-5	Pale yellow, clear	Pearl shape	Nil	Nil	Normal
22	H40802	40/F	Nil	Nil	Nil	6-8	6-8	Pale yellow deposit	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	1-2	Pale yellow, clear	Pearl shape	Nil	Nil	Normal
23	H45393	38/F	Nil	Nil	Nil	1-3	2-4	Colourless, clear	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	1-2	Pale yellow	Round shape	Nil	Nil	Normal
24	H39565	19/F	Nil	Nil	Nil	2-4	2-4	Pale yellow	Oval shape	Nil	Nil	Normal	Nil	Nil	Nil	10-12	Plenty	Pale yellow	Pearl shape	Nil	Nil	Normal
25	H32020	25/F	Nil	Nil	Nil	4-6	Plenty	Pale yellow	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	1-2	Yellow colour	Round shape	Nil	Nil	Normal
26	H52309	40/F	Nil	Nil	Nil	6-7	2-3	Colourless, clear	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	2-3	VDRL	Pale yellow	Round shape	Nil	Nil	Normal
27	H39708	28/F	Nil	Nil	Nil	3-5	4-6	Yellow colour	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	2-4	Pale yellow deposit	Round shape	Nil	Nil	Normal
28	H29167	28/F	Nil	Nil	Nil	3-5	2-4	Pale yellow, clear	Oval shape	Nil	Nil	Normal	Nil	Nil	Nil	2-3	2-3	Pale yellow, clear	Pearl shape	Nil	Nil	Normal
29	H29128	34/F	Nil	Nil	Nil	2-4	2-4	Pale yellow, clear	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	1-2	Yellow colour	Round shape	Nil	Nil	Normal
30	H40791	34/F	Nil	Nil	Nil	3-5	2-4	Lemon yellow	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	2-3	Pale yellow	Pearl shape	Nil	Nil	Normal
31	H33952	30/F	Trace	Nil	Nil	6-8	6-8	Pale yellow	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	2-4	Pale yellow, clear	Round shape	Nil	Nil	Normal
32	H28661	45/F	Nil	Nil	Nil	2-4	3-5	Pale yellow	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	1-2	Pale yellow, clear	Round shape	Nil	Nil	Normal
33	H28607	32/F	Nil	Nil	Nil	4-6	4-6	Pale yellow,turbid	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	2-3	2-3	Colourless, clear	Pearl shape	Nil	Nil	Normal
34	H25312	36/F	Nil	Nil	Nil	2-4	1-2	Pale yellow	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	3-5	2-4	Pale yellow, clear	Pearl shape	Nil	Nil	Normal
35	H47489	41/F	Nil	Nil	Nil	4-5	4-5	Yellow colour,	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	1-2	Pale yellow ,clear	slowly spread	Nil	Nil	Normal
36	H25330	32/F	Nil	Nil	Nil	2-3	2-4	Colourless, clear	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	1-2	Pale yellow	Round shape	Nil	Nil	Normal
37	H29971	30/F	Nil	Nil	Nil	4-6	2-4	Colourless, clear	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	2-3	Pale yellow, clear	Pearl shape	Nil	Nil	Normal
38	H24157	20/F	Nil	Nil	Nil	2-4	2-4	Lemon yellow	Oval shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	2-3	Yellow colour	Round shape	Nil	Nil	Normal
39	H67913	44/F	Nil	Nil	Nil	2-4	2-4	Pale yellow	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	1-3	2-4	Yellow colour	Round shape	Nil	Nil	Normal
40	H37527	31/F	Nil	Nil	Nil	4-6	5-8	Yellow colour,	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	1-3	Pale yellow, clear	Round shape	Nil	Nil	Normal

BEFORE AND AFTER TREATMENT OF 1-40 PATIENTS WET TEST AND KOH FOR FUNGUS REPORTS

S.NO	OP. No	Age/ sex	BT-Microbiology		AT-Microbiology	
			wet test	KOH for fungus	wet test	KOH for fungus
1	H22960	23/F	Positive	Neg	Neg	Neg
2	H28142	45/F	Positive	Neg	Neg	Neg
3	H25871	35/F	Neg	Positive	Neg	Positive
4	H28208	29/F	Neg	Positive	Neg	Neg
5	H29028	29/F	Neg	Positive	Neg	Neg
6	H27729	38/F	Neg	Positive	Neg	Positive
7	H33752	26/F	Neg	Positive	Neg	Neg
8	H52862	37/F	Positive	Neg	Positive	Neg
9	H35141	26/F	Neg	Positive	Neg	Neg
10	H57358	33/F	Neg	Positive	Neg	Neg
11	H32430	21/F	Neg	Positive	Neg	Positive
12	H46840	31/F	Neg	Positive	Neg	Neg
13	H47479	35/F	Neg	Positive	Neg	Neg
14	H39658	39/F	Neg	Positive	Neg	Positive
15	H36165	30/F	Neg	Positive	**Neg**	**Neg**
16	H40688	37/F	Positive	Neg	Positive	Neg
17	H40766	24/F	Neg	Positive	Neg	Neg
18	H34331	42/F	Positive	Neg	Neg	Neg
19	H37543	25/F	Neg	Positive	Neg	Neg
20	H50741	27/F	Positive	Neg	Neg	Neg
21	H49447	29/F	Neg	Positive	Neg	Neg
22	H40802	40/F	Positive	Neg	Positive	Neg
23	H45393	38/F	Neg	Positive	Neg	Positive
24	H39565	19/F	Neg	Positive	Neg	Neg
25	H32020	25/F	Positive	Neg	Neg	Neg
26	H52309	40/F	Positive	Neg	Neg	Neg
27	H39708	28/F	Neg	Positive	Neg	Positive
28	H29167	28/F	Neg	Positive	Neg	Neg
29	H29128	34/F	Positive	Neg	Neg	Neg
30	H40791	34/F	Neg	Positive	Neg	Neg
31	H33952	30/F	Neg	Positive	Neg	Neg
32	H28661	45/F	Positive	Neg	Neg	Neg
33	H28607	32/F	Neg	Positive	Neg	Positive
34	H25312	36/F	Neg	Positive	Neg	Neg
35	H47489	41/F	Positive	Neg	Positive	Neg
36	H25330	32/F	Neg	Positive	Neg	Positive
37	H29971	30/F	Neg	Positive	Neg	Neg
38	H24157	20/F	Positive	Neg	Positive	Neg
39	H67913	44/F	Neg	Positive	Neg	Positive
40	H37527	31/F	Neg	Positive	Neg	Neg

RESULTS : The percentage of wet test negative is 61.5% and the percentage of KOH for fungus negative is 66.6%.

Mean ±Standard deviation of Pus cells - Before and After treatment

Treatment status	Mean ±Std deviation	Significance
Clinical symptoms- BT	5.15±0.607	t = 2.7662, p <0.0086
Clinical symptoms- AT	3.75±0.410	**Moderately significant**

The Pus cells before treatment and after treatment were 5.15 and 3.75 respectively and the reduction of pua cells was moderately significant.

Mean ±Standard deviation of Epithelial cells - Before and After treatment

Treatment status	Mean ±Std deviation	Significance
Epi cells- BT	5.2±0.668	t = 1.1810, p <0.2447
Epi cells- AT	3.95±0.751	**Not significant**

The epithelial cells before treatment and after treatment were 5.2 and 3.95 respectively and it was not significant.

DISCUSSION

DISCUSSION

Kirumi Yoni Rogam is one among the 4448 diseases. This disease is mainly due to aggravated pitha humour which is evident from the quote mentioned below,

"பகர்பித்த விந்தையலாது மேகம் வாராது"[7]

- தேரையர்

As per saint yougi, Kirumi Yoni Rogam is one among the 20 types of Yoni Rogam which can be correlated with specific leucorrhea (Trichomoniasis, Moneliasis etc) in Modern science.

Reproductive health is closely associated with culture of a country as it is well appreciated from the poetic version of Saint Yougi i.e., excessive lust will be the precipitating factor for Kirumi Yoni Rogam.

Kirumi Yoni Rogam is one, which affects the women commonly and frequently. Women in any reproductive age group and even young girls are commonly affected by Kirumi Yoni Rogam. The incidence of Kirumi Yoni Rogam is found in women irrespective of their socio-economic status.

Vaginal infection is more common in women of childbearing age & in older women (post menopausal period).The factors like increasing age, illiteracy, low socioeconomic status, high parity, induced abortion & place of delivery are all contributing factors for occurrence of vaginal discharge. so the investigator has chosen the disease Kirumi yoni rogam to find out a solution and prevent the complications of it through siddha system of medicine.

The present study is a preliminary case study of which 40 cases were selected according to the clinical features mentioned in the poetic version of Saint Yougi in the text of Magalir maruthuvam. Siddha method of diagnosis was carried out for all the patients and also modern investigations were done as per the protocol.

- Institutional ethical committee clearance was obtained for this study.
- As per Standard operative procedure the **drug PADIGARA PARPAM** was prepared at NIS,

- **Drug Name** : PADIGARA PARPAM[2]
- **Dosage** : 130mg (twice a day) after food with ghee
- **Duration** : 24 Days
- Haematological , Urine examination and microbiological studies were done for the patients at NIS clinical laboratory before treatment and as well as after treatment.
- The drug was subjected to the qualitative biochemical analysis in NIS and quantitative Physico chemical analysis in SCRI, Arumbakkam, Chennai.
- The physico chemical analysis of Padigara parpam shows,

  - **Loss on drying at 105°C = 4.39%**
  - **Total ash = 77.597%**
  - **Water soluble ash = 12.105%**
  - **Acid insoluble ash = 36.993%**
  - **pH = 3.80**

- The presence of following minerals have been reported by the analysis of finished product.

  Silicate ,Chloride and Calcium are present in Padigara parpam.
- The drug was subjected to quantitative analysis and morphological study (ICP-OES and SEM in IIT), Chennai. Padigara parpam shows the quantitative measurement of the following minerals ,

  - **Al 396.152 4.025 mg/L**
  - **Ca 315.807 02.360 mg/L**
  - **K 766.491 123.821 mg/L**
  - **Mg 285.213 01.304 mg/L**
  - **Na 589.592 04.310 mg/L**
  - **P 213.617 16.341 mg/L**
  - **S 180.731 21.324 mg/L**

The morphology of the Padigara parapam drug can be determined by **SEM** (FEI Quanta). A representative portion of each sample must be sprinkled onto a double side carbon tape and mounted on aluminium stubs, in order to get a higher quality secondary

electron image for SEM examination. We have observed from SEM photographs that particles are spherical in shapes and sizes are in the range from **0.5 micron to 4 microns**. Although the particle sizes of different batches showed similarity, it seems that these particles are aggregates of much smaller particles. When dispersed in an aqueous medium, these preparations form a **negatively charged hydrophobic particle suspension**. This hydrophobicity gives these particles a tendency to aggregate together to form larger particles. This parpam exhibited larger sizes and agglomeration of the particles. Therefore, the comparatively larger size may be due to the agglomeration of the particles by repeated cycles of calcinations involved in preparation.

- The toxicological studies of Padigara parpam was done in K.K college of pharmacy, Gerukambakkam**.**

Acute toxicity:

In the acute toxicity study, the rats were treated with different concentration of P. Parpam from the range of 5mg/kg to 2000mg/kg which did not produce signs of toxicity, behavioral changes, and mortality in the test groups as compared to the controls when observed during 14 days of the acute toxicity experimental period. These results showed that a single oral dose of the extract showed no mortality of these rats even under higher dosage levels indicating the high margin of safety of this extract. In acute toxicity test compound P.Parpam was found to be non toxic at the dose level of 2000mg/ kg body weight.

Sub acute toxicity

The dose selected for the sub acute toxicity study was 200mg, 400mg/kg. All the animals were free of intoxicating signs throughout the dosing period of 28 days. No physical changes were observed throughout the dosing period. No mortality was observed during the whole experiment. No significant changes were observed in the values of different parameters studied when compared with controls and values obtained were within normal biological and laboratory limits. The weights of organs recorded did not show any significant differences in the treatment and the control group indicating that P. Parpam was not toxic to kidney, liver, spleen, brain There was no significant changes were observed in hemoglobin (Hb), red blood cell (RBC), white blood cell (WBC),

packed cell volume (PCV), Erythrocyte sedimentation rate (ESR) in all the treated groups as compared to respective control groups.

The histopathologial reports shows the following features,

- Normal liver cells with hepatocyte , central vein and portal triad .
- Kidneys cells showed less number of degenerated cells.
- Spleen cells showing normal histology white pulp, red pulp and central arteriole.
- Brain cells with mild degeneration in the cortex.

Observation with reference to age group:

21-30 age group were 40% (16 cases), 31-40 age group were 49% (19 cases), 41-45 age group were 11% (5 cases)

Observation with reference to food habits:

Non vegetarian (70%) are more prone to Kirumi Yoni Rogam than vegetarian (30%).

Observation with reference to family history:

Among 40 patients 40% of cases (16) had a family history of kirumi yoni rogam and 60% of cases (24) had no family history.

Observation with reference to socio-economic status :

Among 40 patients 51% of cases (21) were under poor socio-economic status, 29% of cases (11) were from middle class family and 20% of cases (8) were from rich.

Observation with reference to gunam :

All the 40 cases (100%) were found to posses Rasatha gunam.

Observation with reference to paruva kaalam :

Among 40 cases, most of the cases 29 (71%) were seen to the trial in Pinpanikaalam and in Ilavenil kaalam 11 (29%).

Observation with reference to thinai :

45% (18) of cases were from Marutha nilam, 55% (22) of cases were from Neithal nilam.

Observation with reference to kosangal :

Annamayakosam was affected in (26) 65% of cases, Vignanamaya kosam was affected in (8) 20% of cases, Aanandhamaya kosam was affected in (40) 100% of cases.

Observation with reference to ezhu udal thathukkal :

In ezhu udal thathukkal Saaram (general tiredness, loss of appetite) was affected in 26 (65%) cases, Seneer (low hemoglobin level) was affected in 5 (11%) cases, Enbu and Moolai was affected in 7 (19%) cases, Suronitham (vaginal discharge) was affected in all cases.

Observation with reference to vatham :

Abaanan (vaginal discharge, dysuria, lower abdominal pain) was affected in all cases, Viyaanan and Samaanan (pain in the low back and both the knees) was affected in 23 (59%) cases, Kirukaran (loss of appetite) was affected in 26 (65%) cases, Devathaththan (general tiredness) was affected in 32 (80%) of cases.

Observation with reference to pitham :

Among 40 patients Anal pitham (loss of appetite) was affected in 26 (65%) cases, Ranjaga pitham and Prasagam (low hemoglobin level, paleness) was affected in 5 (11%) cases, Saathagam (low back pain, general tiredness) was affected in 32 (80%) cases.

Observation with reference to kabam:

Among 40 patients Kilethagam (loss of appetite) was affected in 26 (65%) cases, Santhigam (low back pain, knee joint pain) was affected in 32 (80%) cases.

Observation with reference to clinical features:

Clinical features	No. of cases		Percentage (%)	
	Before treatment	After treatment (No Response)	Before treatment	After treatment (No Response)
Profuse, thin, creamy, whitish/slightly greenish frothy discharge or curdy discharge	40	6	100%	15%
Pruritis vulva	32	8	80%	20%
Inflammation of the Vulva	6	0	15%	0%
Dysuria	18	0	45%	0%
Lower Abdominal pain	27	3	68%	8%
Low backache	30	14	75%	35%
Dyspareunia	13	4	32%	10%

Observation with reference to chronicity of illness:

Among 40 patients 13(33%) cases suffered from this disease up to 6 months, 17 cases (42%) suffered upto 1 year, 6 (15%) cases suffered up to 3 years, 4 (10%) cases suffered up to 5 years.

Observation with reference to chronicity of illness:

Among 40 patients ,13 (31%) cases showed positive to wet test in before treatment and 8 (20%)cases showed negative to wet test in after treatment, 27 (69%) cases showed positive to KOH for fungus in before treatment and 18 (45%) cases showed negative to KOH for fungus in after treatment.

Results:

Among 40 patients ,13 (31%) cases showed positive to wet test in before treatment and 8 (20%)cases showed negative to wet test in after treatment, 27 (69%) cases showed positive to KOH for fungus in before treatment and 18 (45%) cases showed negative to KOH for fungus in after treatment.

SUMMARY

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- This study has been approved by IEC of NIS [IEC Approval no: NIS/IEC/8-14/2-26-08-2014]
- Getting authentication for mineral ingredient of Padigaram in Padigara parpam was done from Siddha Central Research Institute, Arumbakkam, Chennai – 106.
- Purification of raw drugs and preparation of trial drug were done in NIS Gunapadam Laboratory, Department of Gunapadam.
- The Qualitative analysis of the PADIGARA PARPAM was done in Biochemistry laboratory, National Institute of Siddha.
  - **Silicate ,Chloride and Calcium are present in Padigara parpam.**
- The physico chemical analysis of Padigara parpam shows,

  - **Loss on drying at 105°C = 4.39%**
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- Brain cells with mild degeneration in the cortex.

- 80 cases were screened by using screening form.
- 40 cases of Kirumi yoni rogam were diagnosed clinically and treated in the
- OPD of dept. of Maruthuvam, Ayothidoss pandithar hospital, National Institute of Siddha.
- All the patients were treated with PADIGARA PARPAM (Internal medicine) after food twice a day with ghee for 24 days.
- Among 40 patients 51% of cases (21) were under poor socio-economic status, 29% of cases (11) were from middle class family and 20% of cases (8) were from rich.
- This study showed that among 40 patients ,13 cases(31%) showed positive to wet test Trichomonas vaginalis) in before treatment and 8 cases(20%) showed negative to wet test in after treatment, 27 cases(69%) showed positive to KOH for fungus(Candida albicans) in before treatment and 18 cases(45%) showed negative to KOH for fungus in after treatment.
- Haematological , Urine examination and microbiological studies were done before and after treatment.
- The clinical and clinical labarotary Observations in the Kirumi yoni rogam patients treated with the trial drug PADIGARA PARPAM showed reduction in the clinical symptoms such as profuse, thin, creamy, whitish/slightly greenish frothy discharge or curdy discharge, pruritis vulva, inflammation of the vulva, lower abdominal pain, low back ache, dyspareunia and improvement in their general health. The Urine examination showed reduction in pus cells and epithelial cells.

CONCLUSION

CONCLUSION

- Siddha way of approach is certainly the best treatment for Kirumi yoni rogam in all aspects as the trial drug Padigara parpam shows marked reduction in the clinical symptoms, pus cells and prevents the infection.
- With the evidence of statistical report, it showed the clinical symptoms before treatment and after treatment were 3.225 and 1.025 respectively and the reduction of clinical symptoms was highly significant. The percentage of reduction of clinical symptoms is 68.22%(1.025÷3.225×100=31.78,100-31.78=68.22%).
- The Total cell count before treatment and after treatment were 7564.75 and 7830 respectively and it was not highly significant.
- The Pus cells before treatment and after treatment were 5.15 and 3.75 respectively and the reduction of pus cells was moderately significant.
- The epithelial cells before treatment and after treatment were 5.2 and 3.95 respectively and it was not significant.
- Clinical study revealed that the trial drug possesed good clinical improvement in 68.22%.
- Among 40 patients ,13 cases (31%) showed positive to wet test in before treatment and 8 cases(20%) showed negative to wet test in after treatment, 27 cases (69%) showed positive to KOH for fungus in before treatment and 18 cases (45%) showed negative to KOH for fungus in after treatment
- Because of the hopeful results clinically , the study may be undertaken with the same drug for a prolonged period in more number of cases and it may throw new lights in the managemet of Kirumi yoni rogam.

ANNEXURES

NATIONAL INSTITUTE OF SIDDHA, CHENNAI – 47

AYOTHIDOSS PANDITHAR HOSPITAL

DEPARTMENT OF MARUTHUVAM

Safety and Clinical evaluation of siddha drug "PADIGARA PARPAM" (Internal) in "KIRUMI YONI ROGAM"

FORM I - SCREENING AND SELECTION PROFORMA

OP NO: NAME: …… AGE: …… GENDER: …

OCCUPATION: ……

ADDRESS:

CONTACT NO:

INCLUSION CRITERIA

- Age:21-45 yrs, married female Yes / No
- Patient having the symptoms of profuse,thin,frothy whitish/Slightly greenish Discharge or curdy discharge per vagina Yes / No
- Pruritis vulva, inflammation of the vulva, dysuria, lower abdominal pain,
- low backache, dyspaerunia Yes / No
- Patient willing to cooperate for vaginal swab examination Yes / No
- Patient willing to undergo routine blood investigation Yes / No
- Positive -Wet test for Trichomonas vaginalis/KOH for fungus Yes / No
- Patient willing to participate in trial and signing in consent form Yes /No

EXCLUSION CRITERIA:

- History of Diabetes mellitus Yes / No
- History of Bacterial vaginosis Yes / No
- History of STD (Syphilis,HIV,gonorrhoea) Yes / No
- History of non specific leucorrhea Yes / No
- Pregnancy and lactation Yes / No
- History of Malignancy Yes / No

ADMITTED TO TRIAL

YES ☐ NO ☐

If Yes Serial NO: ☐☐

Date: Station:

Signature of the Investigator:

Signature of the Lecturer: Signature of the HOD:

NATIONAL INSTITUTE OF SIDDHA, CHENNAI – 47

AYOTHIDOSS PANDITHAR HOSPITAL

DEPARTMENT OF MARUTHUVAM

Safety and Clinical evaluation of siddha drug "PADIGARA PARPAM" (Internal)

in "KIRUMI YONI ROGAM "

FORM II- CASE RECORD FORM

1. STUDY NO ---------- 2. OP/IP NO ---------- REG NO:

3. NAME ---------- 4. . Age (years): _____ Height: ____ m Weight: _____ Kg

5. Educational Status:

1) Literate ☐ 2) Illiterate ☐

6. Occupation:

7. Marital Status: 1.Married ☐ 2 .Unmarried ☐

If married; Gravidity ☐ Parity ☐

Dyspareunia - Present ☐ Absent ☐

8. Complaints and Duration:

_____

_____

_____

MENSTRUAL HISTORY

1. Age at menarche _____ year

2. Regularly of cycle Regular ☐ Irregular ☐

3. Length of cycle [Days]

4. Duration of flow [Days]

5. Dysmenorrhoea started at age _____ years

6. Presence of abdominal pain other than around the time of menstruation

1. Yes ☐ 2.No ☐

VAGINAL DISCHARGE

1. Colour- a.Yellow ☐ b.Green ☐ c.White ☐ d.Blood stained ☐
2. Consistency- a.Thin ☐ b.Thick ☐ c.Creamy ☐
3. Amount- a.Mild ☐ b.Moderate ☐ c.Profuse ☐
4. Odour: 1.Yes ☐ 2.No ☐

VAGINAL EXAMINATION:

Inflammation of the vulva	Yes/No
Inflammation of the labia	Yes/No
Inflammation of the clitoris	Yes/No
Inflammation of the urethral meatus	Yes/No
Inflammation of the vaginal orifice	Yes/No
Inflammation of the bartholin gland	Yes/No

P.V Examination:

Internal genitalia:

Tenderness of the vulva	Yes/No
Scars/Laceration of vagina	Yes/No
Bleeding from the cervix	Yes/No

MEDICAL/SURGICAL HISTORY

Diabetes mellitus	1.Yes ☐	2.No ☐
Bacterial vaginosis	1.Yes ☐	2.No ☐
STD (syphilis, HIV, gonorrhoea)	1.Yes ☐	2.No ☐
Malignancy	1. Yes ☐	2.No ☐

FAMILY HISTORY

Whether this problem runs in family? 1. Yes ☐ 2.No ☐

If yes, mention the relationship of affected person(s)

1._____

2._____

3._____

DIETARY STYLE

1.Pure vegetarian ☐ 2.Non-vegetarian ☐

BOWEL HABITS & MICTURITION:

History of habitual constipation	1.Yes ☐	2.No ☐
History of frequent diarrhoea	1.Yes ☐	2.No ☐
History of frequent dysuria	1.Yes ☐	2.No ☐

7. THEGI: [TYPE OF BODY CONSTITUTION]

Vatham predominant		Kabam predominant	
Pitham predominant		Thondha udal	

8. NILAM: [LAND WHERE PATIENT LIVED MOST]

Kurinji ☐ Mullai ☐ Marutham ☐ Neithal ☐ Palai ☐

(Hilly terrain) (Plains) (Coastal belt) (Aridregions) (Forest range)

9. KAALAM:[SEASON]

Kaarkalam ☐ Pinpanikalam ☐

Koothirkalam ☐ Ilavenil ☐

Munpanikalam ☐ Muthuvenil ☐

10. GUNAM:[CHARACTER]

Sathuvam ☐ Rasatham ☐ Thamasam ☐

DAY OF ASSESSMENT :

0^{th} day ☐ 6^{h} day ☐ 12^{th} day ☐ 18^{th} da ☐

24^{th} day ☐

SIDDHA SYSTEM OF EXAMINATION:

1. ENVAGAI THERVU: [EIGHT-FOLD EXAMINATION]

I.NAADI: [PULSE PERCEPTION]

	0^{th} day	**6^{th} day**	**12^{th} day**	**18^{th} day**	**24^{th} day**
Date					
Vali					
Azhal					
Iyyam					
Vali Azhal					
Azhal vali					
Iyya vali					
Vali Iyyam					
Azhal Iyyam					
Iyya Azhal					

II.NAA:[TONGUE]

	0th day	**6th day**	**12th day**	**18th day**	**24th day**
Date					
Colour	normal/ Red pale/yellow	normal/ Red pale/yellow	normal/ Red pale/yellow	normal/ Red pale/yellow	normal/ Red pale/yellow
Taste	Sweet/Sour/ Pungent/ Bitter/None	Sweet/Sour / Pungent/ Bitter/None	Sweet/Sour/ Pungent/ Bitter/None	Sweet/Sour/ Pungent/ Bitter/None	Sweet/Sour/ Pungent/ Bitter/None
Coating	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent
Fissure	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent
Saliva	Normal/ Increased/ Decreased	Normal/ Increased/ Decreased	Normal/ Increased/ Decreased	Normal/ Increased/ Decreased	Normal/ Increased/ Decreased
Dryness	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent
Glossitis	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent
Baldness	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent

III.NIRAM: [COMPLEXION]

0th day	**6th day**	**12th day**	**18th day**	**24th day**
Date				
Dark/pale/ Yellow tinted/ wheatish brown	Dark/pale/ Yellow tinted/ wheatish brown	Dark/pale/ Yellow tinted/ wheatish brown	Dark/pale/ Yellow tinted/ wheatish brown	Dark/pale/ Yellow tinted/ wheatish brown

IV.MOZHI: [VOICE]

0th day	**6th day**	**12th day**	**18th day**	**24th day**
Date				
Medium/ High/ Low pitched	Medium/ High/ Low pitched	Medium/ High/ Low pitched	Medium/ High/ Low pitched	Medium/ High/ Low pitched

V.VIZHI: [EYES] (Lower palpebral conjunctiva)

0th day	**6th day**	**12th day**	**18th day**	**24th day**
Date				
normal/ Red pale/yellow	Normal/Red pale/yellow	normal/Red pale/yellow	normal/ Red pale/yellow	normal/ Red pale/yellow

VI. MALAM:[BOWEL HABITS / STOOLS]

	0th day	**6th day**	**12th day**	**18th day**	**24th day**
Date					
Colour	Dark/pale / yellow/ Red	Dark/pale / yellow/ Red	Dark/pale/ Yellow/ Red	Dark/pale/ yellow/ Red	Dark/pale/ yellow/ Red
Consistency	Solid/ Semisolid/Watery	Solid/ Semisolid/Watery	Solid/ Semisolid/ Watery	Solid/ Semisolid/Watery	Solid/ Semisolid/Watery
stool bulk	Normal/ Reduced	Normal/ Reduced	Normal/ Reduced	Normal/ Reduced	Normal/ Reduced
Constipation	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent
Diaarhoea	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent

VII.MOOTHIRAM: [URINE EXAMINATION]

Neerkkuri	**0th day**	**6th day**	**12th day**	**18th day**	**24th day**
Date					
Niram[Colour]	Yellow/ Red/ White/ Straw coloured/ Crystal clear	Yellow/ Red/ White/ Straw coloured/ Crystal clear	Yellow/ Red/ White/ Straw coloured/ Crystal clear	Yellow/ Red/ White/ Straw coloured/ Crystal clear	Yellow/ Red/ White/ Straw coloured/ Crystal clear
Manam[Odour]	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent
Nurai[Froth]	Nil/ Reduced/ Increased	Nil/ Reduced/ Increased	Nil/ Reduced/ Increased	Nil/ Reduced/ Increased	Nil/ Reduced/ Increased
Edai[Sp.gravit]	Normal/ Increased/ Reduced	Normal/ Increased/ Reduced	Normal/ Increased/ Reduced	Normal/ Increased / Reduced	Normal/ Increased/ Reduced
Enjal[Deposits]	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent
Volume	Normal/ Increased/ Reduced	Normal/ Increased/ Reduced	Normal/ Increased/ Reduced	Normal/ Increased / Reduced	Normal/ Increased/ Reduced

Neikkuri	**0th day**	**6th day**	**12th day**	**18th day**	**24th day**
Date					
Serpentine fashion	at___mints	at___ mints	at___ mints	at___ mints	at___ mints
Annular/Ringed fashion	at___mints	at___ mints	at___ mints	at___ mints	at___ mints
Pearl beaded fashion	at___mints	at___ mints	at___ mints	at___ mints	at___ mints
Mixed fashion	at___mints	at___ mints	at___ mints	at___ mints	at___ mints
Other fashion	at___mints	at___ mints	at___ mints	at___ mints	at___ mints

VIII. SPARISAM: [PALPATORY PERCEPTION]

0^{th} day	6^{th} day	12^{th} day	18^{th} day	24^{th} day
Date				
Warmth/Hot/ cold/ Sweat	Warmth/Hot /cold/ Sweat	Warmth/Hot /cold/ Sweat	Warmth/Hot/ cold/ Sweat	Warmth/Hot/ cold/ Sweat

2. IYMPORIGAL:[SENSORY ORGANS]

	0^{th} day	6^{th} day	12^{th} day	18^{th} day	24^{th} day
Date					
	Normal/ Affected	**Normal / Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**
Mei [Skin]					
Vaai[Buccal cavity]					
Kan [Eyes]					
Mooku[Nose]					
Sevi [ear]					

3. IYMPULANGAL: [MOTOR ORGANS]

	0^{th} day	6^{th} day	12^{th} day	18^{th} day	24^{th} day
Date					
	Normal/ Affected	**Normal / Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**
Kai [upperlimb]					
Kal					

[lowerlimb]					
Vai[Buccal cavity]					
Eruvai [excretory organ]					
Karuvai[Reporduc-tive organ]					

4. KOSAM: [SHEATHS]

	0th day	**6th day**	**12th day**	**18th day**	**24th day**
Date					
	Normal / Affected	**Normal / Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**
Annamaya kosam					
PranamayaKosam					
Manonmayakosam					
Vingyanamaya kosam					
Anandhamaya kosam					

5. MUKKUTRAM: [AFFECTION OF THREE HUMORS

A) VATHAM:

	0th day	**6th day**	**12th day**	**18th day**	**24th day**
Date					
	Normal / Affected	**Normal / Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**
Praanan					
Abaanan					
Samaanan					
Udhaanan					
Viyaanan					
Naahan					
Koorman					
Kirukaran					
Devathathan					
Dhananjeyan	.....	.....	.....	-----	-------

B) PITHAM:

	0th day	**6th day**	**12th day**	**18th day**	**24th day**
Date					
Analapitham	**Normal /**	**Normal /**	**Normal/**	**Normal/**	**Normal/**
Prasakam	**Affected**	**Affected**	**Affected**	**Affected**	**Affected**
Ranjakam					
Aalosakam					
Saathakam					

C) KABAM:

	0th day	6th day	12th day	18th day	24th day
Date					
	Normal/ Affected	**Normal / Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**
Avalambagam					
Kilethagam					
Pothagam					
Tharpagam					
Santhigam					

6. SEVEN DHATHUS: [SEVEN SOMATIC COMPONENTS]

	0th day	6th day	12th day	18th day	24th day
Date					
	Normal/ Affected	**Normal / Affected**	**Normal / Affected**	**Normal/ Affected**	**Normal/ Affected**
Saaram[chyme]					
Senneer[Blood]					
Oon[Muscle]					
Kozhuppu[Fat]					
Enbu[Bones]					
Moolai[Bonemarrow]					
Sukkilam/Suronitham [Genital discharges]					

7.SYSTEMIC EXAMINATION:

	0th day	6th day	12th day	18th day	24th day
Date					
CardioVascular System					
Respiratory System					
Gastrointestinal System					

8.GENERAL EXAMINATION:

	0th day	6th day	12th day	18th day	24th day
Date					
Height (cms)		**NA**	**NA**	**NA**	**NA**
Weight (kg)					
Temperature(°F)		**NA**	**NA**	**NA**	**NA**
Pulse rate (per min)					
Heart rate (per min)					
Respiratoryrate(per min)					
Blood pressure(mm/Hg)					
Pallor					
Jaundice					
Cyanosis					
Lymphadenopathy					
Pedal edema					
Clubbing					
Jugular vein pulsation					

1. CLINICAL SYMPTOMS:

	0^{th} day	6^{th} day	12^{th} day	18^{th} day	24^{th} day
Date					
Profuse, thin, creamy, whitish/slightly greenish frothy discharge or curdy discharge					
Pruritis vulva					
Inflammation of the Vulva					
Dysuria					
Lower Abdominal pain					
Low backache					
Dyspareunia					

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer: **Signature of the HOD:**

NATIONAL INSTITUTE OF SIDDHA, CHENNAI – 47,

AYOTHIDOSS PANDITHAR HOSPITAL

DEPARTMENT OF MARUTHUVAM

Safety and Clinical evaluation of siddha drug **"PADIGARA PARPAM"** (Internal) in "**KIRUMI YONI ROGAM"**

FORM IV -DRUG COMPLIANCE FORM

S. NO: --------- OPD/IPD NO: ---------- NAME: ---------- REG NO:

Name Of The Drug: Padigara parpam-130 mg bid after food

DAY	DATE	MORNING	EVENING
DAY1			
DAY2			
DAY3			
DAY4			
DAY5			
DAY6			
DAY7			
DAY8			
DAY9			
DAY10			
DAY11			
DAY12			
DAY13			
DAY14			
DAY15			
DAY16			
DAY17			
DAY18			
DAY19			
DAY20			
DAY21			
DAY22			
DAY23			
DAY24			

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FORM III LABORATORY INVESTIGATION FORM

1. OP/IP No: _____ 2 .S. No: _____ 3.Reg no:

BLOOD INVESTIGATION		Before treatment Date:	After treatment Date:	NORMAL VALUES
HB (gms %)				11-15
T.RBC(milli/cu.mm)				3.5-5.5
ESR (mm)	½ hr.			
	1 hr.			0-20
T.WBC (cu.mm)				4000-11,000
DIFFERENTIAL COUNT (%)	Polymorphs			40-75
	Lymphocytes			20-35
	Monocytes			2-10
	Eosinophils			1-6
	Basophils			0-1
Blood glucose (mg/dl)	Fasting			80-120
	PP			<130
	Random			<140
Lipid profile (mg/dl)	Serum cholesterol			150-250
	HDL			30-60
	LDL			Upto 130
	VLDL			40
	TGL			Upto 160
RFT (mg/dl)	Blood urea			16-50
	Serum creatinine			0.6-1.2
	Serum Uric acid			2.5-7.5
LFT (mg/dl)	Total bilirubin			0.2-1.2
	Direct bilirubin			0.1-1.2
	Indirect bilirubin			0.2-0.7
	Serum total protein			6-8
	Serum Albumin			3.5-5.5
	Serum globulin			2-3.5
	Serum fibrinogen			
	Serum calcium			9-11
	Serum phosphorous			2-5
	SGOT IU/L			0-40
	SGPT IU/L			0-35
	Alkaline phosphatase IU/L			80-290

URINE INVESTIGATION

Urine investigation	Before TMT(with Date)	After TMT (With Date)
Albumin		
Fasting sugar		
PP sugar		
Random Sugar		
Deposits		
Bile salts		
Bile pigments		
Urobilinogen		

MICROBIOLOGY

SEROLOGY	Before treatment Date:	After treatment Date:
VDRL		

SPECIAL INVESTIGATION

VAGINAL SMEAR	Before treatment Date:	After treatment Date:
WET TEST FOR TRICHOMONAS VAGINALIS		
KOH FOR FUNGUS		

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer: **Signature of the HOD:**

NATIONAL INSTITUTE OF SIDDHA, CHENNAI – 47

AYOTHIDASS PANDITHAR HOSPITAL

DEPARTMENT OF MARUTHUVAM

Safety and Clinical evaluation of siddha drug "PADIGARA PARPAM" (Internal) in "KIRUMI YONI ROGAM "

FORM V- PATIENT INFORMATION SHEET

Name of the Principal Investigator: Dr.N.Elavarasi (PG Student)

Name of the Institution : National Institute of Siddha
TambaramSanatorium
Chennai-47.

I Dr.N.Elavarasi studying M.D (Siddha) in National Institute of Siddha, Chennai. I am doing a clinical trial on the study of **Kirumi yoni rogam.** It is the specific vaginal infection like Trichomoniasis, Moniliasis etc. Trichomoniasis is the most common easily curable Sexually transmitted disease. The factors like increasing age,illiteracy,low socioeconomic status, high parity, induced abortion & place of delivery are all contributing factors for occurrence of vaginal discharge. It includes symptoms of Profuse, thin, creamy whitish/yellowish discharge ,Vulval irritation, Pruritis vulva, Dysuria, Abdominal pain, Low backache, Dyspareunia. Moniliasis is caused by candida albicans, a gram positive yeast –like fungus. The patient complains of curdy white vaginal discharge with intense vulvovaginal pruritis. The predisposing factors are diabetes, pregnancy, use of broad spectrum antibiotics, combined oral contraceptive pills, steroids, immunosuppression-HIV, thyroid and parathyroid disease. This condition is being treated in NIS with many siddha formulations.

As a part of M.D(S) research programme and developing new efficacious medicine, I have proposed to study the drug **Padigara parpam** for treating this condition. This formulation has been mentioned in siddha literature and empirical evidence with contemporary tools is required for documentation. You can receive medicines free of cost. The duration of treatment period is **24 days**. You have to visit NIS 6 days once and collect drugs for **6days.** The diagnosis tests will be carried out free of cost.We will assess the effect of treatment after completion of **24days** of treatment using clinical and lab parameters.

In this regard, I need to ask you few questions. I will maintain confidentiality of your comments and data obtained from you. There will be no risk of disclosing your identity and no physical, psychological or professional risk is involved by taking part in this study.

Taking part in this study is voluntary. No compensation will be paid to you for taking part in this study. You can choose not to answer any specific question. There is no specific benefit for you if you take part in the study, but you will be under our clinical monitoring and specific attention will be given for your health. Taking part in the study may be of benefit to the community, as it may help us to develop medicine for Kirumi yoni rogam. In case of any adverse symptoms like severe low back pain, increased profuse white discharge during the treatment shall be reported to me and care will be taken in NIS for relief. You can withdraw from the study at the midst of treatment period, if you are not interested to continue and you will receive our usual treatment without condition.

The information collected in this study, will remain between you and me as a principal investigator.I will not write your name on different forms which sent to different investigating/analysis sections and I will use a code instead given by the principal investigator. Only the principal investigator will know the key to this code which will be kept in safe custody. If you agree to be a participant in this study, you will be screened as per the study protocol.

If you wish to find out more about this study before taking part, you can ask me all the questions you want or contact **Dr.N.Elavarasi,** PG student cum principal investigator of this study, attached to the National Institute of Siddha, Chennai **(Mobile phone no:9789879343).** You can also contact the Chairman/Member-secretary of Ethics committee, National Institute of Siddha, Chennai – 600047, Tel no: 91-44-22411611, for rights and participation in the study.

தேசிய சித்த மருத்துவ நிறுவனம்,
அயோத்திதாசர் பண்டிதர் மருத்துவமனை
சென்னை 47

கிருமியோனி ரோக நோய்க்கான சித்த மருந்தின் (படிகார பற்பம்) பரிகரிப்புத் திறனைக் கண்டறியும் மருத்துவ ஆய்விற்கான தகவல் படிவம்

FORM V- தகவல் படிவம்

முதன்மை ஆராய்ச்சியாளர் பெயர் : Dr. நி.இளவரசி

நிறுவனத்தின் பெயர் : தேசிய சித்த மருத்துவ நிறுவனம்s
தாம்பரம் சானட்டோரியம்
சென்னை 47

Dr.நி.இளவரசி ஆகிய நான் தேசிய சித்த மருத்துவமனையில் பட்ட மேற்படிப்பு பயின்று வருகிறேன். **கிருமியோனி ரோகம்** என்னும் நோயாகும் எளிதில் குணப்படுத்தக்கூடிய ஒரு பால்வினை நோயாகும். இந்நோயானது அதிகபடியான வெள்ளை கசிவு, பிறப்புறுப்பில் அரிப்பு, சிறுநீர் எரிச்சல், முதுகு வலி, புணர்ச்சி வலி போன்ற குறிகுணங்களைத் தோற்றுவிக்கும். இந்நோய்க்கு தேசிய சித்த மருத்துவமனையில் பல சித்த மருந்துகள் பயன்படுத்தப்பட்டு வருகின்றது. சித்த மருத்துவ பட்ட மேற்படிப்பில், ஆய்வின் ஒரு பகுதியாக புதிய மருந்துகளை பயன்படுத்தும் நோக்கில் **படிகார பற்பம்** என்னும் மருந்தினை இந்நோய்க்கு வழங்க பரிந்துரை செய்கிறோம். இந்த மருந்தின் செய்முறை, அளவு, அனுபானம் மற்றும் மருத்துவ பயன்கள் அனைத்தும் அங்கீகரிக்கப்பட்ட சித்த மருத்துவ நூலில் கூறப்பட்டுள்ளது. எந்தவித கட்டணமுமின்றி தாங்கள் இந்த மருந்தினை பெற்றுக்கொள்ளலாம். இந்த ஆய்வில் மருந்து உட்கொள்ளும் காலம் 24 நாட்கள் ஆகும். 6 நாள்களுக்கு ஒருமுறை தேசிய சித்த மருத்துவமனைக்கு நேரில் வந்து மருந்தினை பெற்றுக்கொள்ள வேண்டும். இந்த ஆய்வு சம்பந்தமான ஆய்வக பரிசோதனைகள் கட்டணமின்றி செய்யப்படும். 24 நாட்கள் மருந்து உட்கொள்ளும் காலம் முடிந்த பிறகு நோய்க்கான குறிகுணங்கள் மற்றும் ஆய்வக பரிசோதனைகள் இவற்றின் முடிவுகளின் அடிப்படையில் மருந்தின் பரிகரிப்புத்திறன் கண்டறியப்படும்.

இந்த ஆய்வு சம்பந்தமாக சில கேள்விகளை தங்களிடம் கேட்க இருக்கிறேன். தங்களிடமிருந்து பெறப்படும் கருத்துக்கள் மற்றும் குறிப்புகள் அனைத்தும் நம்பிக்கையாக பதிவு செய்யப்படும்.இந்த ஆய்வில் தங்களை உட்படுத்திக்கொள்வதின் மூலம் எந்த வகையிலும் பாதிப்புக்குள்ளாக மாட்டீர்கள் என உறுதி அளிக்கிறேன்.

எந்தவித வற்புறுத்தலுமின்றி, இந்த ஆய்வில் பங்கேற்கவும், இந்த ஆய்வு சம்பந்தமாக கேட்கப்படும் கேள்விகளுக்கு பதில் கூறவும் தங்களுக்கு முழு சுதந்திரம் அளிக்கப்படுகிறது. இந்த ஆய்வில் பங்கேற்பதற்கு எந்த சன்மானமும் வழங்கப்படமாட்டாது. ஆனால், ஆய்வு முழுவதும் எனது மேற்பார்வையிலும், தங்கள் உடல்நலன் குறித்த தனி கவனத்திலும் ஆய்வு மேற்கொள்ளப்படும். கிருமியோன ரோகம் நோய்க்கான புதிய மருந்தின் பரிகரிப்புத்திறனை சமூகத்திற்கு உணர்த்தும் வகையில் இந்த ஆய்வு மேற்கொள்ளப்படுகிறது. இந்த ஆய்வில், மருந்து உட்கொள்ளும் காலத்தில் சிலருக்கு மிக அதிகபடியான வெள்ளை கசிவு , தாங்கமுடியாத முதுகுவலி போன்ற மாறுபட்ட குறிகுணங்கள் தொடர்ந்து இருக்கும் பட்சத்தில், முதன்மை ஆராய்ச்சியாளரான என்னிடம் தெரிவிக்கப்பட்டு, தேசிய சித்த மருத்துவமனையில் அதற்க்கான தீர்வு வழங்கப்படும். இந்த ஆய்வினைத் தொடர தங்களுக்கு விருப்பம் இல்லையெனில், எப்பொழுது வேண்டுமானலும் ஆய்வின் இடையில் விலகிக்கொள்ளவும், இம்மருத்துவமனையில் வழங்கப்படும் இந்நோய்க்கான வழக்கமான மருந்துகளை பெற்றுக்கொள்ளவும் அறிவுறுத்தப்படுகிறீர்கள்.

இந்த ஆய்வில் சேகரிக்கப்படும் விபரங்கள் அனைத்தும் தங்களுக்கும் முதன்மை ஆராய்ச்சியாளரான எனக்கும் இடையில் ரகசியமாக வைக்கப்படும். கேள்வி பதில் வடிவத்தில் தங்களிடம் கேள்விகள் கேட்கப்படும். அனைத்துப் படிவங்களிலும் தங்களின் பெயர் தவிர்க்கப்பட்டு ஆய்வாளரால் தங்களுக்கென தனிக் குறியீடு வழங்கப்படும். அந்தக் குறியீடு ஆய்வாளருக்கு மட்டுமே தெரிந்ததாக இருக்கும். நீங்கள் இந்த ஆய்வில் பங்கேற்க விருப்பப்பட்டால், திட்ட வரைவு படி தேர்வு செய்யப்படுவீர்கள்.

நீங்கள் இந்த ஆய்வில் பங்கேற்கும் முன், இந்த ஆய்வினைப் பற்றிய மேலும் விபரங்கள் பெற வேண்டுமென விருப்பப்பட்டால், இந்த ஆய்வின் முதன்மை ஆராய்ச்சியாளர் மற்றும் தேசிய சித்த மருத்துவமனை,பட்ட மேற்படிப்புத்துறை மாணவி **Dr.நி.இளவரசி** ஆகிய என்னை **9789879343** என்ற எண்ணில் தொடர்பு கொள்ளலாம். மேலும், நீங்கள் இந்த ஆய்வில், உங்களது பங்கேற்பு மற்றும் உரிமை பற்றி தெரிந்து கொள்ள தேசிய சித்த மருத்துவமனை, தலைவர்/செயற்க்குழு உறுப்பினர் அவர்களையும் 91-44-22411611 என்ற எண்ணில் தொடர்பு கொள்ளலாம்.

NATIONAL INSTITUTE OF SIDDHA, CHENNAI – 47

AYOTHIDOSS PANDITHAR HOSPITAL

DEPARTMENT OF MARUTHUVAM

Safety and Clinical evaluation of siddha drug "PADIGARA PARPAM" (Internal)

in "KIRUMI YONI ROGAM"

FORM VI –INFORMED CONSENT FORM

*"**I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have asked have been answered to my satisfaction.***

***I consent voluntarily to participate in this study and understand that I have the right to withdraw from the study at any time without in any way it affecting my further medical care**".*

"I have received a copy of the information sheet/consent form".

Date:

Signature of the participant:

In case of illiterate participant

*"**I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely**."*

Date:

Signature of a witness Left thumb Impression of the Participant

(Selected by the participant bearing no connection with the survey team)

Date:

Station:

Signature of participant:

Signature of the Investigator:

Signature of the Lecturer: **Signature of the HOD**

தேசிய சித்த மருத்துவ நிறுவனம்

அயோத்திதாச பண்டிதர் மருத்துவமனை, சென்னை - 47.

பட்ட மேற்படிப்பு மருத்துவத்துறை

கிருமியோனி ரோக நோய்க்கான சித்த மருந்தின் (படிகார பற்பம்) பரிகரிப்புத் திறனைக் கண்டறியும் மருத்துவ ஆய்விற்கான தகவல் படிவம்

FORM VI- ஒப்புதல் படிவம்

நான் மேற்கூறிய தகவல் படிவத்தை படித்து அல்லது படிக்க கேட்டு கொண்டேன். து தொடர்பான விளக்கங்களையும் கேட்டு தெரிந்து கொண்டேன். எந்த வித வற்புறுத்தலின்றி, என் சொந்த விருப்பத்தின் பேரில் என்னை ந்த ஆராய்ச்சிக்கு உட்படுத்த என் முழுமனதோடும் சுயநினைவோடும் சம்மதம் தெரிவிக்கின்றேன். எனக்கு விருப்பமில்லாத பட்சத்தில் இந்த ஆராய்ச்சியில் இருந்து என்னை எப்போது வேண்டுமானாலும் விடுவித்து கொள்ளும் உரிமையை பெற்றுள்ளேன் என்பதையும் அறிவேன்.

தேதி:
இடம்:

சாட்சிக்காரர் கையொப்பம்:
பெயர்:

கையொப்பம்:
பெயர் :

உறவுமுறை :

NATIONAL INSTITUTE OF SIDDHA, CHENNAI – 47

AYOTHIDOSS PANDITHAR HOSPITAL

DEPARTMENT OF MARUTHUVAM

Safety and Clinical evaluation of siddha drug "PADIGARA PARPAM" (Internal)

in "KIRUMI YONI ROGAM "

FORM VII-WITHDRAWAL FORM

1. SERIAL NO. OF THE CASE: ……
2. OP / IP NO: .....
3. NAME: …… 4.AGE: …… 5.GENDER: .....
6. DATE OF TRIAL COMMENCEMENT: ……...
7. DATE OF WITHDRAWAL FROM TRIAL: ……..
8. REASONS FOR WITHDRAWAL:

Long absence at reporting:	Yes/ No
Irregular treatment:	Yes/ No
Shift of locality:	Yes/No
Increase in severity of symptoms:	Yes/No
Development of severe adverse drug reactions:	Yes/No

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer: Signature of the HOD:

NATIONAL PHARMACOVIGILANCE PROGRAMME FOR SIDDHA DRUGS

Reporting Form for Suspected Adverse Reactions to Siddha Drugs

Please note: i. All consumers / patients and reporters information will remain confidential.

ii. It is requested to report all suspected reactions to the concerned, even if it does not have complete data, as soon as possible.

Peripheral Center code: State:

1. Patient / consumer identification (please complete or tick boxes below as appropriate)

<table>
<tr><td>Name</td><td>Father name</td><td rowspan="2">Patient / Record No.</td></tr>
<tr><td>Ethnicity</td><td>Occupation</td></tr>
<tr><td colspan="2" rowspan="2">Address
Village / Town
Post / Via
District / State</td><td>Date of Birth / Age:</td></tr>
<tr><td>Sex: Male / Female
Weight :
Degam:</td></tr>
</table>

2. Description of the suspected Adverse Reactions (please complete boxes below)

Date and time of initial observation		Season:
Description of reaction		Geographical area:

3. List of all medicines / Formulations including drugs of other systems used by the patient during the reporting period:

Medicine	Daily dose	Route of administration & Vehicle - Adjuvant	Date		Diagnosis for which medicine taken
			Starting	Stopped	
Siddha					
Any other system of medicines					

4. Brief details of the Siddha Medicine which seems to be toxic :

Details	Drug – 1	Drug – 2	Drug - 3
a) Name of the medicine			
b) Manufacturing unit and batch No. and date			
c) Expiry date			
d) Purchased and obtained from			
e) Composition of the formulation / Part of the drug used			

a. Dietary Restrictions if any
b. Whether the drug is consumed under Institutionally qualified medical supervision or used as self medication.
c. Any other relevant information.

5. Treatment provided for adverse reaction:

6. The result of the adverse reaction / side effect / untoward effects (please complete the boxes below)

<table>
<tr><td>Recovered:</td><td>Not recovered:</td><td>Unknown:</td><td>Fatal:</td><td>If Fatal
Date of death:</td></tr>
<tr><td colspan="2" rowspan="2">Severe: Yes / No.</td><td colspan="3">Reaction abated after drug stopped or dose reduced:</td></tr>
<tr><td colspan="3">Reaction reappeared after re introduction:</td></tr>
<tr><td colspan="2">Was the patient admitted to hospital? If yes, give name and address of hospital</td><td colspan="3"></td></tr>
</table>

7. Any laboratory investigations done to evaluate other possibilities? If Yes specify:

8. Whether the patient is suffering with any chronic disorders?

Hepatic Renal Cardiac Diabetes Malnutrition

Any Others

9. H/O previous allergies / Drug reactions:

10. Other illness (please describe)

11. Identification of the reporter:

Type (please tick): Nurse / Doctor / Pharmacist / Health worker / Patient / Attendant / Manufacturer / Distributor / Supplier / Any others (please specify)
Name:
Address:
Telephone / E – mail if any :

Signature of the reporter: **Date:**

Please send the completed form to:

Name & address of the RRC-ASU / PPC-ASU

The Director
National Institute of Siddha,
(Pharmacovigilance Regional Centre For Siddha Medicine),
Tambaram Sanatorium, Chennai-600 047.
☏ (O) 044-22381314 Fax : 044 – 22381314
Website : www.nischennai.org
Email: nischennaisiddha@yahoo.co.in

* ** * * * *

This filled-in ADR report may be sent within one month of observation /occurrence of ADR

Who Can Report?
⇒ Any Health care professionals like Siddha Doctors / Nurses / Siddha Pharmacists / Patients etc.

What to Report?
⇒ All reactions, Drug interactions,

Confidentiality
⇒ The patient's identity will be held in strict confidence and protected to the fullest extent

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer: Signature of the HOD

NATIONAL INSTITUTE OF SIDDHA, CHENNAI – 47

AYOTHIDASS PANDITHAR HOSPITAL

DEPARTMENT OF MARUTHUVAM

Safety and Clinical evaluation of siddha drug "PADIGARA PARPAM" (Internal)

in "KIRUMI YONI ROGAM "

FORM VIII- DIETARY ADVICE FORM

The following diet to be taken:

- Drink adequate water
- Leafy greens & vegetables
- Lady's finger
- Onion
- Ginger
- Steamed vegetables & vegetable salads
- Riped bananas
- Lemon or orange juice
- Apple
- Black plums
- Pears
- Gooseberry
- Dates
- Fig fruit
- Pome granate
- Grapes
- Guava
- Whole wheat
- Brown rice
- Milk
- Butter milk
- Ghee
- Fenugreek
- Coriander seeds
- Cumin seeds

The following food should be avoided:

- Bitter gourd
- Chicken
- Meat
- Coconut
- Jack fruit
- Asafoetida
- Mango
- Brinjal
- Sesbanian leaves
- Mustard
- Sesame
- Tamarind
- Eggs
- Mushrooms
- Bread
- Sweets
- White sugar
- Tea
- Coffee
- Preserved cool drinks
- Oily & fried foods
- Sour foods

AVOID

- Tobacco
- Alcohol
- Excessive lust

தேசிய சித்த மருத்துவ நிறுவனம், சென்னை 47

அயோத்திதாசர் பண்டிதர் மருத்துவமனை

கிருமியோனி ரோக நோய்க்கான சித்த மருந்தின் (படிகார பற்பம்) பரிகரிப்புத் திறனைக் கண்டறியும் மருத்துவ ஆய்விற்கான தகவல் படிவம்

FORM VIII- DIETARY ADVICE FORM

சேர்க்க கூடிய உணவு வகைகள்:

- கீரைகள்,
- வெண்டைக்காய்
- சின்னவெங்காயம்
- இஞ்சி
- வேகவைத்த காய்கறிகள்
- வாழைப்பழம்
- எலுமிச்சை சாறு
- ஆப்பிள்
- பேரிக்காய்
- நெல்லிக்கனி
- பேரீச்சம்பழம்
- அத்திபழம்
- மாதுளை
- திராட்சை
- கொய்யா
- கோதுமை
- தீட்டாத அரிசி
- பால்
- மோர்
- நெய்
- வெந்தயம்
- தனியா
- சீரகம்

தவிர்க்க கூடிய உணவு வகைகள்

- பாகல்
- கோழிக்கறி
- ஆட்டுக் கறி
- கத்தரி
- அகத்திக்கீரை
- தேங்காய்,மாங்காய்
- எள்,கடுகு
- பலா
- பெருங்காயம்
- புளி
- முட்டை, காளான்
- வெள்ளை சர்க்கரை
- தேநீர்,காபி
- எண்ணெய், வறுத்த உணவுகள்,துவர்ப்பு உணவுகள்

தவிர்க்கவேண்டியவை

- புகையிலை
- கள்ளு
- அதிகபடியானபோகம்.

The Tamil Nadu Dr.M.G.R. Medical University

#69, Anna salai, Guindy, Chennai-600 032.

This certificate is awarded to

Dr./~~Mr.~~/~~Ms.~~ N. ELAVARASI

for participating as ~~Resource Person~~ / Delegate in the Fifteenth Workshop on

"Research Methodology & Biostatistics"

for AYUSH Post Graduates & Researchers

Organised by the Department of Siddha

The Tamil Nadu Dr. M.G.R. Medical University from 23.06.2014 to 27.06.2014.

Dr. N. KABILAN M.D. (Siddha)
Reader, Dept. of Siddha

Dr. JHANSI CHARLES, M.D.
Registrar

Prof. Dr. D. SHANTHARAM, M.D., D.Diab.,
Vice-Chancellor

THE TAMILNADU Dr.M.G.R. MEDICAL UNIVERSITY, GUINDY, CHENNAI-600 032

DEPARTMENT OF SIDDHA

XV WORKSHOP ON "RESEARCH METHODOLOGY AND BIOSTATISTICS"

Attendance Certificate

This is to certify that Dr N. Elavarasi of National Institute of Siddha, Tambaram Sanatorium, Chennai-600 047 has attended the WORKSHOP ON "RESEARCH METHODOLOGY AND BIOSTATISTICS" from **23.06.2014 to 27.06.2014** at The Tamil Nadu Dr MGR Medical University, Chennai-600 032.

27/6/14

Dr.N.Kabilan
Reader, Dept. of Siddha

NATIONAL INSTITUTE OF SIDDHA
राष्ट्रीय सिद्ध संस्थान
Department of AYUSH- MINISTRY OF HEALTH & FAMILY WELFARE
आयुष विभाग - स्वास्थ्य एवं परिवार कल्याण मंत्रालय
GOVERNMENT OF INDIA-भारत सरकार
TAMBARAM SANATORIUM, CHENNAI -600 047 -ताम्बरम सनटोरियम चेन्नई -600 047
फोन\Tele : 044-22411611 फैक्स\Fax : 22381314
ईमेल: nischennaisiddha@yahoo.co.in वेब :www.nischennai.org

F.No.NIS/6-20/IEC/14-15 Dt: 25.09.14

CERTIFICATE

Address of Ethics Committee: National Institute of Siddha, Tambaram Sanatorium, Chennai-600047, Tamil Nadu, India	
Principal Investigator: Dr.N.Elavarasi, P.G. Student, Maruthuvam	
Protocol title: Safety and clinical evaluation of Padigara parpam (Int) in Kirumi Yonirogam (Trichomoniasis)	
Documents filed	1) Protocol, 2) Data Collection forms 3) Patient Information Sheet 4) Consent form 5) SAE(Pharmacovigilance)
Clinical trial Protocol (others – Specify)	**Yes**
Informed consent documents	**Yes**
Any other documents	-
Date of IEC approval & its number	**NIS/IEC/8-14/2 - 26-08-2014**

We approve the trial to be conducted in its presented form.

The Institutional Ethics Committee expects to be informed about the progress of the study, any SAE occurring in the course of the study, any changes in the protocol and patient information / informed consent.

Chairman **Member Secretary**

K.K. COLLEGE OF PHARMACY

(Approved by AICTE, PCI & Government of Tamilnadu and
Affiliated to The Tamilnadu Dr. MGR Medical University)
1/161, Sankaralinganar Road, • Gerugambakkam, • Chennai - 600128
Phone : (044) 32546162, Tele/Fax : 23821272

Ref: 4526/KKCP/2015 **Date: 10.08.2015**

APPROVAL CERTIFICATE

This is to certify that the project title " *Safety and Clinical evaluation of siddha drug "**PADIGARA PARPAM**"* has been approved by IAEC and the details are furnished under

Project Code	Name of the species	Breakup sexwise	Weight	Number proposed	Number approved
KKCP/2015/030	Wistar Albino rat	13 Male + 19 female	150–200gms	36	32
Thirty two only					

Chairman IAEC

(Prof. A. Meena)

Veterinary Officer

(V. VAIDHYALINGAM)

CPCSEA Nominee

10/08/15

(Dr. C. Kathirvelan)

Members

Dr K Sadasivan Pillai

சித்த மருத்துவ மைய ஆராய்ச்சி நிலையம், அரும்பாக்கம், சென்னை - 600106
सिद्ध केन्द्रीय अनुसंधान संस्थान, अरुम्बाक्कम, चेन्नै - 600106
Siddha Central Research Institute
(Central Council for Research in Siddha, Ministry of AYUSH, Govt. of India)
Arumbakkam, Chennai – 600106
[Ph: 044-26214925, 26214809, Fax: 26214809, Email: crisiddha@gmail.com, Web: www.siddhacouncil.com]

29.12.2015

CERTIFICATE

Certified that the samples submitted for identification by Dr. N. Elavarasi, III year MD Student, Department of Maruthuvam, National Institute of Siddha, Sanatorium, Chennai-600 047 is identified as Padigaram – Potassium aluminium silicate.

02/1/16
(R. Shakila)
Research Officer (Chemistry)

P. Shankari
(Dr. P. Shankari R.O(Ch.Sec.2))
for **(Dr. P.Sathiyarajeswaran)**
Assistant Director (Scientist 2)-I/c

BIBLIOGRAPHY

BIBLIOGRAPHY

1. Magalir maruthuvam by Dr.Venugopal, 4th edition 2008, pg 124.
2. Kannusaami Parambarai Vaithiyam by c.Kannusamy pillai,5th edition, 2006, pg382 - 383
3. Gunapadam Thaathu Jeeva Vaguppu by Dr. R. Thiyagarajan, L.I.M., 4th edition, 2004, Pg no 397, 701, 687, 702
4. Shaw's text book of gynaecology by VG padubidri,Shirish N Daftary,13th edition,pg.124-126.
5. K.N.Kuppuswami muthaliar, Siddha maruthuvam pothu, Sixth edition,2004.
6. T.V.Sambasivam pillai, Introduction to Siddha Medicine,Second edition, 1993.
7. Dr.M.Shanmugavelu, Noi Naadal Noi Muthal Naadal Thirattu, part 1, Thired edition,2003.
8. Thearaiyar Neerkuri & Neikuri, First edition , June 2000.
9. Yogi Munivar,Yoogi Vaithiya Chinthamani, 2 nd Edition:2005,P.No: 145, 155,156.
10. http://www.Mayo clinic.org/diseases-condition /trichomoniasis /basics /definition/ con-20034596
11. http://www.cdc.gov/std/tg2015/candidiasis.htm
12. https://www.cdc.gov/fungal/diseases/candidiasis/genital
13. http://www.dermnetz.org/fungal/vaginal-candidiasis.html
14. https://en Wikipedia.org/wiki/female reproductive or system leucorrhea.
15. WWW.Webexhibits.org/butter/compositon.html.
16. www.fao.org/agriculture/dairy-gateway/milk and milk - products / milk - composition.